

# RE-EXAMINING EPA'S MANAGEMENT OF THE RENEWABLE FUEL STANDARD PROGRAM

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## HEARING

BEFORE THE

SUBCOMMITTEE ON  
REGULATORY AFFAIRS AND FEDERAL  
MANAGEMENT

OF THE

COMMITTEE ON  
HOMELAND SECURITY AND  
GOVERNMENTAL AFFAIRS  
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## **RE-EXAMINING EPA'S MANAGEMENT OF THE RENEWABLE FUEL STANDARD PROGRAM**

**THURSDAY, JUNE 18, 2015**

U.S. SENATE,  
SUBCOMMITTEE ON REGULATORY,  
AFFAIRS AND FEDERAL MANAGEMENT,  
OF THE COMMITTEE ON HOMELAND SECURITY  
AND GOVERNMENTAL AFFAIRS,  
*Washington, DC.*

The subcommittee met, pursuant to notice, at 9:01 a.m., in room SD-342, Dirksen Senate Office Building, Hon. James Lankford, Chairman of the Subcommittee, presiding.

Present: Senators Lankford, Ernst, Sasse, Heitkamp, and Peters.

### **OPENING STATEMENT OF SENATOR LANKFORD**

Senator LANKFORD. Good morning, everyone. I want to welcome everyone to today's Subcommittee hearing on the Renewable Fuel Standard (RFS).

I was privileged in the U.S. House to chair two prior hearings on this topic. I look forward to another important discussion regarding the Renewable Fuel Standard and its management.

The ideals of the RFS are laudable: to improve our Nation's energy security and preserve the environment. Since 2005, daily domestic oil production has nearly doubled. Meanwhile, other government regulations, such as Fuel Economy Standards, combined with the economic recession, have led to lower demand than anticipated. Additionally, the increased use of natural gas and improved energy efficiency have lowered our greenhouse gas emissions.

For many years, the RFS has chased the annual mandates. Statutorily, the U.S. Environmental Protection Agency (EPA) is required to release the mandated volumes by November 30 of the preceding year to allow those covered by the mandate to plan for the future. The EPA has not met this deadline since 2009 and we are still awaiting the EPA for the final version of the 2014 volumes, even though the year in question has been over for 6 months.

An announcement was made in November of last year that we would not see a final rule until the calendar year was over. The agency cited significant comment and controversy as the reason they could not finalize volumes, seemingly an admission that this program is unworkable in its current form. There is a tremendous amount of controversy around the RFS; there are a lot of opinions circling and a lot of emotions around this particular issue.

In accordance with a court order, on June 1, 2015, the proposed mandates for 2014, 2015, and 2016 were all released together. Although some might say better late than never, we need to take a serious look at why these delays are unavoidable every year now under current law.

As for the actual numbers, the EPA has proposed 2014, 2015, and 2016 requirements, including increased, unattainable at times, levels of renewables in those quotas for the gasoline supply over the next year and a half. The EPA has chosen to wisely work from the actual used volumes for 2014, but the future mandates called for by the proposed rule represent an aspirational goal of breaching the blend wall with very little time for increased consumer use of vehicles equipped to handle higher ethanol fuels.

The likelihood that the volumes for cellulosic and advanced fuel required under the RFS will have to be reset by the EPA starting next year increases the regulatory uncertainty. This authority will likely be triggered due to the agency waiving significant percentages of the volume mandated by the law in face of production not being nearly as high as imagined by Congress in 2007, when the RFS was last modified. Let me reassert again, Congress is the one who set the rule in 2007, but the EPA is the one who has to figure out how to manage this, since the cellulosic production is not close to what was predicted in statute.

After a decade of implementation, we must ask ourselves if the RFS goals of yesterday are worth the increased cost to our food, gas, and the environment. From the price of livestock feed, to the additional cost to restaurant owners, to the everyday Americans who live with more expensive grocery bills, the program has had a negative impact in many areas.

Beyond real concerns over engine damage, there have also been additional costs to motorists at the pump. On the environmental front, new studies are highlighting the program's negative impact on our land, water, and air, specifically ozone.

Today, we have the opportunity to review the EPA's management of the program and take stock of the current state of the RFS. I anticipate an insightful hearing and am pleased that our witness, Janet McCabe, could join us. Thank you for being here again. I look forward to re-examining these issues with my colleagues and our witness today.

With that, I recognize the Ranking Member, Senator Heitkamp, for her opening statement.

#### **OPENING STATEMENT OF SENATOR HEITKAMP**

Senator HEITKAMP. Thank you, Mr. Chairman.

I want to start by first saying I wish we were not having this hearing today. I wish there was no question over the management of the RFS or the Environmental Protection Agency's ability to implement the RFS as Congress intended. But, unfortunately, we are in a place where EPA has created, I think in some ways unknowingly, uncertainty to our biofuels producers, from corn ethanol, to biodiesel, to cellulosic ethanol producers. And, this uncertainty and lack of predictability is costing us investments. It is costing us environmentally and it is costing us jobs.

I am a strong supporter of truly “all of the above” energy policy security. Along with Senator Lankford, my State is one of the leading producers. I do not know where Oklahoma is on that rank, but North Dakota is No. 2 in the production of oil, and we have a lot of associated gas. We have a lot of wind resource. And, we certainly have a lot of bio-resource. And, so, this is a huge issue to my State. And I can tell you that I think the RFS is part of that “all of the above” policy.

When we look at what RFS means to my State of North Dakota alone, the industry represents \$2.5 billion in annual economic output, almost 9,000 jobs. In Oklahoma, the RFS helped create about 4,300 jobs. In Wisconsin, \$4.2 million in economic output with over 19,000 jobs. And in Iowa, obviously a major ethanol and biofuels producer, \$19.3 billion with almost 74,000 jobs in the mix. And, I think I could go on.

I think these numbers are important to highlight because the RFS is critical to our economy, and that is why it is so important that it be administered correctly, as Congress intended.

I am glad the EPA finally released the new proposed rules for 2014, obviously late. I do not think anyone can say releasing those numbers in 2015, where there is not finality to the rule and will not be until the end of 2015—2014 rules were not timely. I do not think there is any doubt about it, and that has created a great amount of disruption. But, I do want to take time and praise this important first step and I want to thank Ms. McCabe for her leadership in making that happen.

Unfortunately, the proposal continues to ignore congressional intent and reduces congressionally mandated blended volumes, citing availability of distribution capacity. The statute only allows for an inadequate supply waiver for domestic biofuels supply and not a distribution capacity waiver. In fact, in 2005, the House included a waiver provision for distribution capacity, but the final bill was passed by the House and the Senate did not.

So, I hope when the EPA puts out its final rule this November, they will toss out this flawed and disallowed reasoning and return the management of the program to the way Congress actually intended. If they do that, the program will work just fine, as it did in the first years of the RFS.

I think certainty needs to be our top concern when it comes to Federal regulation, legislation, or anything else that we do here in Washington, and certainly on this Committee, we spend a lot of time talking about predictability and certainty as essential components to a proper business environment.

Providing that certainty for our producers and businesses is absolutely critical so that they can plan long-term and grow their business. And, Congress provided that certainty, I believe, in 2005 and 2007 when it passed and amended the RFS by setting very clear volumes and guidance on when those volumes may be waived. The best way to get back on track and provide certainty, I think, is to follow these very clear congressional mandates.

Because this uncertainty has real consequences, I mentioned earlier the contribution RFS has made to our States. When managed out of line with congressional intent, you can imagine there are negative consequences. In fact, the advanced and cellulosic biofuels

sectors have already lost \$13.7 billion in investments due to EPA's delay. For biofuels, 54 plants in 30 States have closed or idled because of the lack of certainty from EPA. In 2014, nearly 80 percent of U.S. biofuel producers scaled back production, and almost 6 in 10 idled production altogether. I know this as a certainty because our Velva, North Dakota biodiesel plant stalled production in biodiesel for the first part of 2015.

However, I must emphasize again that this is not a problem with the RFS, but, rather, a problem with the administration of the RFS. As one testimony for the record noted, EPA's failure to issue RFS rules in a timely manner that is consistent with the law should not be misconstrued as a sign that the program is broken. Up until 2013, the program worked as intended, to spur innovation and growth in the advanced and cellulosic biofuels space.

So, I look forward to hearing from Ms. McCabe on EPA's past successes of administration of the program and how they can get back to those past successes. And, I would say, I am particularly interested in the process and how that process can be amended. This is not a hearing to talk about whether we should repeal or in any way adjust the RFS, but what we can do to make this program administered in a way that provides certainty.

So, thank you, Ms. McCabe, for showing up, and thank you, Mr. Chairman, for the opportunity to offer a statement.

Senator LANKFORD. That is great.

At this time, we will proceed with testimony from our witness. Janet McCabe is the EPA's Acting Assistant Administrator at the Office of Air and Radiation. She previously served as the Office of Air and Radiation's Principal Deputy to the Assistant Administrator.

I would like to thank Ms. McCabe for appearing before us today. It is good to be able to see you again.

In the tradition of this Subcommittee, we swear in all witnesses that appear before us. If you do not mind, I would like to ask you to stand and raise your right hand.

Do you swear the testimony that you are about to give before the Subcommittee will be the truth, the whole truth, and nothing but the truth, so help you, God?

Ms. MCCABE. I do.

Senator LANKFORD. Thank you. You may be seated. Let the record reflect that the witness answered in the affirmative.

We will be using a timing system today, but you are the only witness in our conversation. We would like you to stay as close as you can to the 5-minute time period. We have obviously received your excellent statement for the record. You are welcome to build on that or to be able to reinforce that or to be able to talk about a totally different thing, if you would like to, as well, and then we will have some question time.

As we have done in the past in this Subcommittee, and you and I have done before in the House, the first round will be set questions at 5 minutes each. After that, it will be open dialogue here among the dais. We will have both interchange here on the dais as well as with you, and it will be a more open conversation.

So, I would be glad to be able to receive your testimony now.



**TESTIMONY OF JANET MCCABE,<sup>1</sup> ACTING ASSISTANT ADMINISTRATOR, OFFICE OF AIR AND RADIATION, U.S. ENVIRONMENTAL PROTECTION AGENCY**

Ms. McCABE. Thank you, Chairman Lankford, Ranking Member Heitkamp, and other Members of the Subcommittee. Good morning. I appreciate the opportunity to testify on the Renewable Fuel Standard program and EPA's recent volumes proposal.

The Clean Air Act requires EPA to publish annual standards for four different categories of renewable fuels: Total, advanced, biomass-based diesel, and cellulosic. These standards apply to producers and importers of gasoline and diesel fuel.

On May 29, EPA issued a proposal that would establish the standards that apply for years 2014 through 2016 and the volume of biomass-based diesel for 2017. We will finalize these standards by November 30, at which point we will have returned to the statutory time line for issuing the Renewable Fuel Standards.

EPA recognizes that the delay in issuing the standards for 2014 and 2015 has led to uncertainty in the marketplace. This proposal establishes a path for ambitious, responsible growth in biofuels and helps provide the certainty that the marketplace needs to allow these low-carbon fuels to further develop.

Congress set annual standards for biofuel use that increase every year. It also included in the law tools known as the waiver provisions for EPA to use in the event that it determined the statutorily prescribed volumes could not be met. Our recently issued proposal seeks to ensure that the growth of renewable fuel production and use continues consistent with congressional intent. It uses our waiver authority in a judicious manner to establish ambitious, but responsible and achievable standards.

The proposal addresses 3 years' worth of standards and would set the volume requirement for biomass-based diesel for a fourth year. For 2014, we are proposing standards at levels that reflect the actual amount of biofuel used domestically in 2014. For 2015 and 2016, and for 2017 for biomass-based diesel, the proposed standards would provide for steady increase over time.

The proposed volumes reflect our consideration of two essential factors: First, that the market can respond to ambitious volume targets; and second, that there are limits today to the amount of volumes that can be supplied to consumers.

The steadily increasing volumes that we have proposed mean that biofuels will remain an important part of the overall strategy to enhance energy security and address climate change. We are optimistic about the future of biofuels and think our proposal will put us on a pathway for steady growth in the years to come, as Congress intended.

Many stakeholders rightly want to know why the volume targets established in the statute cannot be reached. There are several reasons: Slower than expected development of the cellulosic biofuel industry and the resulting shortfall in cellulosic biofuel supply; a decline in gasoline consumption rather than the growth projected in 2007; and constraints in supplying certain biofuels to consumers, ethanol at greater than 10 percent of gasoline, in particular. Our

<sup>1</sup> The prepared statement of Ms. McCabe appears in the Appendix on page 36.

proposal includes a discussion of this last constraint, known as the E10 blend wall.

If gasoline demand continues, on average, to trend downward or remain flat, increasing the amount of ethanol used in the fuel pool will require significantly greater use of gasoline blends with higher ethanol content. EPA has taken steps to pave the way for increased use of higher level ethanol blends, including granting partial waivers for the use of E15 in certain light-duty cars and trucks beginning with model year 2001. At the same time, EPA recognizes that there are real limitations in the market to increase use of these fuels, including current near-term limits on fueling infrastructure.

Our proposal aims to balance two dynamics, Congress' clear intent to increase use of renewable fuels over time to address climate change and increase energy security, and real world circumstances, such as the E10 blend wall, that have slowed progress toward such goals. Thus, we are proposing standards that will still drive growth in renewable fuels at an ambitious, but responsible, rate.

For 2016, we are proposing numbers to incentivize real growth. For example, we propose to set total renewable fuel volumes about 9 percent higher, advanced biofuel about 27 percent higher, and biodiesel standards in 2017 about 17 percent higher than the actual 2014 volumes. We believe that these proposed volumes are achievable and consistent with Congress' clear intent to drive renewable fuel use up, even as we use the authorities that Congress provided EPA to manage the program responsibly.

EPA has taken other steps to improve the administration of the RFS program. We have improved the quality, transparency, and efficiency of our petition review process for new biofuel pathways that can count under the RFS program. And it is important to remember that the RFS program is only one part of the overall picture for biofuels. Both the U.S. Department of Agriculture (USDA) and the Department of Energy (DOE) have programs looking at ways to support biofuels and biofuel infrastructure, and we work closely with them as we implement this statute.

We will be holding a public hearing on June 25 in Kansas City, Kansas, and we look forward to hearing from all stakeholders during the public comment period, which ends on July 27. And, as I said, we intend to finalize the rule by November 30 of this year.

Again, I thank you for the opportunity to serve as a witness at this hearing and I look forward to your questions and to the discussion.

Senator LANKFORD. Thank you.

The Ranking Member and I, we are going to defer our questions to the end of this round, which means I would recognize Senator Ernst for the first questions.

#### **OPENING STATEMENT OF SENATOR ERNST**

Senator ERNST. Thank you, Mr. Chairman, thank you, Ranking Member Heitkamp, for this wonderful discussion that we will be having this morning. I appreciate the opportunity. And, thank you, Ms. McCabe, for joining us today.

I would like to start off by saying thanks so much. We do know that you are working very hard in this area, so I appreciate that. I appreciate your testimony, and I believe personally that this is

not only an economic issue, but, of course, a national security issue, as well.

This Committee does have a history of working together across the aisle on security and good governance matters and I look forward to working with my colleagues on this important topic.

Clean and renewable energy is a topic that everyone in the United States can get behind, and over the years, the RFS has proved successful at driving innovation and effective options for consumers at the pump. And, as many of you may know, Iowa leads the Nation in biofuels creation, producing 3.8 billion gallons of clean burning ethanol and 230 million gallons of biodiesel, and that is from our 2013 numbers. We are also home to two state-of-the-art cellulosic ethanol facilities with another coming into production later this year. Additionally, we boast retailers across the State that offer affordable ethanol and biodiesel blends to consumers.

When passed by Congress, the original intent of the RFS was to create consumer choice for clean fuel by spurring investment in research, production, and infrastructure. Unfortunately, the EPA is now using the lack of infrastructure as an excuse for setting biofuels levels lower than originally mandated, which flies in the face of the law.

This issue is of critical importance to the State of Iowa as well as the Nation. Ensuring our domestic energy security and promoting innovation in the next generation of biofuels is crucial as we move forward.

As you may know, Ms. McCabe, in February, I invited EPA Administrator Gina McCarthy to visit Iowa and to see the impact of the delayed release of the RFS volumes. Additionally, last week, the entire Iowa delegation—Republican, Democrat, the entire delegation—sent another letter to the Administrator, urging her to hold a hearing on the RFS levels in our State. Can we expect either of these to happen?

Ms. MCCABE. Thank you, Senator. I cannot speak for the Administrator's schedule, but I can certainly take back to her that you raised this this morning and her office can respond.

Senator ERNST. Thank you.

Ms. MCCABE. Yes. In terms of the hearing, as I mentioned, we are holding a public hearing in Kansas City, Kansas. We have a regional office there. There is great interest in this issue across the country and it is always a challenge for us to choose the location of the limited number of hearings that we are able to have. And, in this case, we felt that having a hearing in Kansas City was well located for many States that are very interested in this issue and we have the support of our local office there. As of yesterday, I think we had about 250 people signed up, including a number of people from Iowa. So, we will look forward to a very good and robust attendance there.

Senator ERNST. Thank you. And, if you would, just please emphasize to her that that is an open invitation, because we do want to see the EPA Administrator in Iowa to just experience some of the difficulties we have had with the lack of action on part of the EPA.

If we can move on to infrastructure and congressional intent, in your testimony, you cite lack of available refueling infrastructure as justification for not setting the Renewable Volume Obligations (RVOs) higher. However, when Congress passed the RFS in 2005, only two types of waiver authorities were included, and that was lack of supply and severe economic harm. That Conference Committee rejected available refueling infrastructure, which would have severely limited consumer choice and the ability to get more of those biofuels into the marketplace.

Despite the clear direction from Congress, EPA has now decided to use available refueling infrastructure as a condition to waive the standard, even though Congress expressly rejected that when they set the law. Can you explain why the EPA is blatantly overlooking the law?

Ms. MCCABE. Sure. I would be happy to discuss this. And, of course, this is an issue on which there are many views, as well, and happy to explain ours.

The language in the statute, as you observe, gives two reasons for EPA to waive the standards, and the one that we are looking at here is the one that says inadequate domestic supply. And, I understand that there was activity in finalizing those words, but, in fact, those words are very simple in the statute and do not explicitly say exactly what that means. And, as is often the case, it is EPA's job to reasonably interpret congressional language in implementing the statute.

We lay this out at some length in our proposal, and I would be happy to share that with you if you have not seen it, but the bottom line, Senator, is that our interpretation of that term is that Congress intended for these fuels not only to be produced, but to be used. That is where the value in greenhouse gas reduction and diverse energy supply and, as you say, consumer choice comes. And, so, when you have a situation where the fuels cannot, in fact, be delivered to consumers on the timeframe that was set out in the statute and Congress provided this waiver authority, we believe it is a reasonable interpretation for us to reduce the volumes to a level that still will comply with Congress' intent to drive the fuels.

This was a big thing that Congress did in the RFS. It was calling for big and significant change. And, the program stretches out over a number of years, and in order to change a system in this dramatic a way, it is taking time. And, we believe that looking over the history of this program in the last few years and what we can project forward, to set the standards at the statutory volumes would simply not be appropriate. There is too far a way to go. And, so, the waiver provision is there for EPA to use in its considered judgment to set ambitious, but responsible, levels.

Senator ERNST. I thank you. I know my time has expired. I would argue that we are caught in a very vicious cycle with the producers not knowing what that volume will be, so we have actually delayed production and research and the furthering of those types of fuels. So, without the standards being set, we do not know where to go. So, I just continue to state, we need reliable energy sources for all of our consumers. We would like them to make that choice.

But, thank you very much, Mr. Chairman.

Senator LANKFORD. Thank you. Senator Sasse.

**OPENING STATEMENT OF SENATOR SASSE**

Senator SASSE. Thank you, Mr. Chairman.

Ms. McCabe, thank you for being here. I actually have a series of questions that will followup on Senator Ernst's questions, as well, because it feels to me like what you hear from the EPA about corn production volumes and the Department of Agriculture are quite different, and there is a lot of discussion in your Quadrennial Review about coordination. So, I will come back to some of that in a minute, but I just want to associate myself with Senator Ernst's questions, as well.

As the EPA considered the proposed rule for the RVO standards, did you use any studies or metrics to model how the proposed rule would affect transportation fuel prices?

Ms. MCCABE. The way that the rule, or the program, affects transportation prices is very complicated and we did not attempt to estimate the impacts on transportation fuel prices.

Senator SASSE. OK. So, no studies or models on transportation fuel prices that you have used?

Ms. MCCABE. We certainly look at all of those, but we ourselves did not try to estimate what the impacts would be.

Senator SASSE. So, would it be possible for us to get a list of the studies and the models that you consulted?

Ms. MCCABE. Sure.

Senator SASSE. OK, great. We will follow-up. Thank you.

And, in your proposed rule, did you conduct any studies to model how the proposed rule would affect international trade, and in particular, I wonder if you evaluated changes in trade flows in biofuels between the United States and Brazil.

Ms. MCCABE. We did not do any of that work ourselves. Again, those are issues that many people look into, and we certainly pay attention to work that others do, but we did not do that ourselves.

Senator SASSE. So, when you are evaluating the proposed rule, when you are deciding what you are going to promulgate, are those studies and what you consulted that we could have access to—

Ms. MCCABE. Sure.

Senator SASSE [continuing]. We could have a sense of what you consulted?

Ms. MCCABE. Sure. Anything that we looked at, you certainly can—

Senator SASSE. Great.

Ms. MCCABE [continuing]. Look at yourself.

Senator SASSE. OK. Thank you.

In your testimony, and this is, again, picking up on some of what Senator Ernst was arguing—

You say that the EPA will continue to engage stakeholders and be working in consultation with USDA and the DOE.

Ms. MCCABE. Yes.

Senator SASSE. In April, the Department of Energy released its Quadrennial Review and it stressed that DOE and the Department of Defense (DOD) would be continuing research and demonstration activities to develop drop-in biofuels, particularly for use in aviation and large vehicles.

In addition, the report states that the Department of Energy would be providing technical support to the States, communities, and private entities wishing to invest in infrastructure to dispense higher-level ethanol blends. The USDA, for its part, has crop projection reports on corn that state that the amount of corn used in calendar year 2014 is estimated to be 14.2 billion bushels, up well from the 2013 estimate, and average yields for the United States are estimated to be at a record high 171 bushels an acre. I think what this means is that the USDA is saying that there is plenty of corn and the Department of Energy is saying that we need more infrastructure and more research.

I think when you listen to corn growers in my State, they are skeptical about your promises of the close consultation across the Department and also with different geographies, and they actually just wonder if you all are skeptical of corn. And, so, I wonder if you see their skepticism and if you can explain to them how it is believable that you are actually listening to these other agencies.

Ms. MCCABE. Well, indeed, we do. I can assure you that we work closely with the USDA and DOE. I, myself, have been involved in many conversations with staff and leaders from those agencies as we worked on this and other issues, and there is very much a commitment across the Administration to work to implement the RFS and promote the development and use of renewable fuels. So, it is hard to convince people who might have a different view, but I think that our proposal reflects the fact that we consult with those agencies. And, we are not agricultural economists. We do not try to be. That is their job to do. So, we certainly must work with them, and we do.

Senator SASSE. It just feels to a lot of people who are trying to make production decisions that it is hard to reconcile the different agencies' views of the future of the corn crop.

I am a cosponsor of S. 1239, which is a bill introduced by Senators Donnelly, Grassley, and Fischer that expands waivers of the vapor pressure limitations that otherwise make it harder for E15 to be used in the summer driving season. I have some questions for you related to the problem that that tries to solve. Some of these may end up being technical enough that we will need to do it for the record.

But, the State of Nebraska is able to provide us with a breakdown of the number of registered vehicles by fuel source, including automobiles that are capable of using flex fuel and E10 in our State of Nebraska. In light of your concerns over the refueling and vehicle infrastructure issues in the United States, would you be able to provide an EPA estimate of how many vehicles in the total U.S. fleet are capable of supporting fuel above E15, and in particular, how many can use flex fuel, and would you be able to elaborate more on the breakdown by fleet in the amount of vehicles that could support each category of fuel.

Ms. MCCABE. We do have numbers to answer those questions. I do not have them with me, but we would be glad to provide them.

Senator SASSE. Great. We will followup today with a letter.

Ms. MCCABE. OK.

Senator SASSE. Thank you.

Ms. MCCABE. Great.

Senator LANKFORD. Senator Peters.

**OPENING STATEMENT OF SENATOR PETERS**

Senator PETERS. Thank you, Mr. Chairman.

Thank you, Ms. McCabe, for EPA's hard work and for your work in administering the RFS program, and I look forward to working with you in the months and years ahead as we continue to work on this.

As a Senator from Michigan, I am always looking for ways to diversify the U.S. vehicle fuel supply and making our Nation more energy independent and improving our environment. And, the RFS, I believe, has been a proven program that is driving forward alternative fuels and economic development. It is creating new clean energy jobs. And, it is also, at the same time, strengthening our agricultural markets.

And, while I appreciate the effort of the EPA to set ambitious domestic biofuel targets while also trying to balance achievable standards, I believe these targets that you have do not really reflect Congress' intended goals for the RFS.

When Congress passed the RFS, the intent was to set ambitious and aggressive targets to spur innovation in biofuels production technology and invest in infrastructure to bring these biofuels to market. And, in order to accomplish these goals, I believe we have to stay the course and we have to keep the RFS intact.

EPA's latest proposal is an improvement, certainly, over the 2013 proposal, but the proposed volume requirements for the next few years, I believe, do have consequences for our economy, for our energy security, and for the environment. In addition, EPA's delays in rulemaking over the past 2 years have chilled necessary investment in advanced and cellulosic biofuels just as they have reached commercial development.

The latest proposal cites lack of supply as a reason to reduce volumes. It was not the congressional intent to allow the EPA to cite the availability of supply for blending and distribution as a condition to its waiver authority. I joined a letter that was signed by 37 Senators stating the condition being cited falls outside of what we think is clearly defined waiver authority.

In relation to the infrastructure investment, I believe it is clear that the proposal will depress renewable fuel credit prices and will eliminate incentives that exist today for infrastructure investment, and this is troubling, given the fact that before the rule, infrastructure investment was rising very rapidly and now it has stalled as a result of some of these delays.

What is your plan to get infrastructure investments made if this proposed rule is finalized without any changes?

Ms. MCCABE. Well, we think that there are a number of things that will happen. As you, yourself, have cited, and many others have, too, the certainty of having the volumes out there is absolutely critical for people to know what is coming, and I think that this proposal signals an intent of the Administration and the EPA to steadily grow volumes over time, and that certainty is very important.

The USDA, which was mentioned a minute ago, is very committed to looking to enhance and improve infrastructure. It re-

cently announced a program to help do that with grant funds to help build infrastructure. And, we think that the combination of those efforts, things that we are doing in order to streamline the pathway approval process so that we can get these new and innovative pathways approved and into the market, will also help, and that as you put those things together, certainty from the regulatory side, some support from USDA and others across the Administration, and people realizing that more fuel, more choice will attract consumers to want these fuels, those things will help us move in the right direction and continue to make real progress.

Senator PETERS. So, as you mentioned, why the importance of certainty and before we had certainty, the impact it has, I think the Biotechnology Industry Organization revealed that recent research has found that \$13.7 billion in investment in advance biofuels was lost just during the one-year since the proposal. Does that sound accurate to you, and is that not a big concern?

Ms. MCCABE. I really could not speak to that number, Senator, but we absolutely are concerned about what the lack of certainty has created. That is why we are getting this program back on schedule.

Senator PETERS. Well, do you see the amount of renewable fuels blended into fuel supply increasing in future years beyond 2016, and if so, how do you see that playing out past 2016?

Ms. MCCABE. Oh, I do see it continuing to grow. I think, as Senator Ernst acknowledged, before the RFS, there was very little of this fuel in the market. There is now much more than there was, and we see growth and we see pathways coming in. I have many conversations with stakeholders from across the biofuels industry who are very optimistic about their ability to supply fuel to the marketplace. And, as I noted before, this law is calling for something of a significant transformation in the way transportation fuel is provided, and these volumes, we believe, will continue to encourage and promote and drive those changes.

Senator PETERS. Were greenhouse gas emissions considered as the agency prepared your rule in 2014, and if so, what were the results?

Ms. MCCABE. Well, greenhouse gas emissions are fundamental to the purpose of the RFS. When we set up the program in our 2010 rule, we did an evaluation of greenhouse gases. For the annual fuel volumes, we do not do an independent re-look at greenhouse gas emissions.

Senator PETERS. OK. Well, I look forward to continuing to work with you. This is a critical industry, industry in my State as well as the other States here, and it is a critical part of energy independence for our country, and with agriculture, in particular, and we have a special connection given the fact that I represent Michigan, which is the center—we like to believe is the center of the auto industry, as well. So, I look forward to working with you.

Ms. MCCABE. Thank you.

Senator LANKFORD. Ms. McCabe, I really appreciate you being here and this ongoing conversation. Let me walk through some history we walked through together because, again, we are looking at how we are going to resolve this in the future.



In 2010, the final rule for the RFS was 4 months late. In 2011, it was a good year. It was only 2 weeks late. In 2012, one and a half months late. In 2013, 9 months late. In 2014, 18 months late and counting. In 2015, 6 months late and counting.

The challenge is, once we get into 2016, 2017, 2018, and keep going, how does this get better and how does RFS get back on schedule to be ready by November, or has Congress put a requirement on EPA that it cannot fulfill? Is there something systemically in the structure that year after year they cannot meet this requirement?

Ms. McCABE. Senator, I think that is a very fair question, and EPA does not like missing deadlines, either. I think that a couple of things have happened, as we talked about last time when I visited with you, that made 2014 particularly challenging and led to these significant delays. And, I am an optimistic person. My job is to implement this program and meet our statutory obligations in terms of timeframe, so I am confident that we will do that, and I am confident for a couple of reasons.

One is through this rulemaking this year, we will get ourselves back on track. We have—2014 was something of—was a significant year because of the impacts of the ethanol—the E10 blend wall, which was a significant issue that people engaged in very robustly. And, that time was going to come at some point in the implementation of the RFS, and last year was the year that it came.

We learned a lot from that process and from all the conversations that we had with people, and our proposal, our current proposal, reflects a very different approach to implementing the required volumes in the statute, evaluating those in light of the fact that we are now at and beyond the E10 blend wall.

And, the approach that we have taken now, which, as it lays out 3 years, can show the EPA's thinking over that 3-year period of time, is reflective of the fact that we have not finalized the rule and we want to make sure we understand everybody's views on it, but if we were to continue with that sort of approach, we would have an approach that we firmly believe would enable us to issue the annual volume standards in a timely way.

Our staff of technical folks working on the RFS program are working on it all the time, so it is not that we—

Senator LANKFORD. No, I do not think there is anyone that believes that you are not working on it.

Ms. McCABE. Yes.

Senator LANKFORD. It is just a matter of the method and the timing of it.

Ms. McCABE. Yes.

Senator LANKFORD. The concern is the—let us say 2014, 2015, 2016 are all finalized November 30, so we have that out. Then, come November 2016, now we are in reset time. Cellulosic—I would assume you would agree, there is no chance we are going to hit the targets for 2017 based in statute, what is required. So, that will require a reset. We are not going to be 50 percent unless there is a tremendous amount of cellulosic that comes on board.

With the assumption, as well, the way the statute is written, corn-based ethanol continues to decrease, as required in statute, and cellulosic continues to increase, required by statute. I mean, if

there is a clear aspect of the law, that is clear in the law. That is also not possible based on production.

So, you are in a very odd quandary come November 2016, trying to promulgate 2017. So, I guess where I am coming at is, great, it looks like we are going to announce 2016 on time. Twenty-seventeen is coming. How do we avoid that?

Ms. McCABE. So, a couple things in response to that. You mentioned the reset requirements——

Senator LANKFORD. Right.

Ms. McCABE [continuing]. And the statute does lay out circumstances under which we consider a reset, which is a significant undertaking——

Senator LANKFORD. Right.

Ms. McCABE [continuing]. Because it is for multiple years into the future.

Senator LANKFORD. But, would you agree on the cellulosic, we are going to decrease that number by at least 50 percent——

Ms. McCABE. Yes.

Senator LANKFORD [continuing]. Setting that.

Ms. McCABE. Yes. I would agree.

Senator LANKFORD. OK.

Ms. McCABE. And, depending on how these volumes turn out, we may hit the reset trigger for the other volumes, as well. We actually think that it makes a lot of sense to focus a reset on all volumes at one time. It just will provide a lot more certainty to everybody to do that.

We also recognize that we have an ongoing obligation to set the annual volumes. So, we will be looking to plan our work so that we can accommodate setting annual volumes while also proceeding to consider resetting if we trigger the reset for the volumes.

Senator LANKFORD. So, let us talk about how you get comment and conversation going on a reset because setting the proposed volumes, that is one methodology that there is some conversation on right now, and then you will finalize that rule by November 30 of this year. Then, we have to do both the reset and volumes next year. Will that be two different processes? Will there be a comment period based on the reset and a comment period based on the annual? Will they be combined? Because I would assume you are creating a method, basically, on how to do reset in case that has to be done again in 2018 or 2019, to try to evaluate it from there. So, two different processes or one process?

Ms. McCABE. I think it is likely that a reset process would take longer than the one-year required for the annual volumes. So, while this is not firmly decided, my expectation is that it would likely be two processes, and each would have comment opportunities and multiple opportunities for stakeholder input. We would do much information gathering as part of both of those processes.

Senator LANKFORD. OK. So, would the reset process start before 2016 begins, if that is going to take more than a year, because, obviously, you have to promulgate that annual amount——

Ms. McCABE. Right.

Senator LANKFORD [continuing]. For 2017 by November 2016. If the reset, which I would agree, will take longer in the conversation, because it will be very contentious, to say the least——there are a

lot of different players that are very interested in this—and again, I come back to there is a lot of conversation about corn-based ethanol, but the mandate in the statute is it decreases and cellulosic increases and we have to be able to figure out, how does that work when cellulosic does not exist in near the quantities that are needed.

Ms. MCCABE. Yes.

Senator LANKFORD. So, as that reset comes through, when do you anticipate that is going to go out for comment and will start?

Ms. MCCABE. So, our highest priority right now is to make sure that we get the 2014, 2015, and 2016 volumes out. That does not mean that we do not have our staff already thinking about the kinds of things—

Senator LANKFORD. Sure. I understand.

Ms. MCCABE [continuing]. They need to be thinking about for the reset. So, I do not have a schedule for you on that reset rule-making, but I can assure you that the minute 2016 is done, we will be turning our full attention to the 2017 rule and to the reset if triggered.

Senator LANKFORD. So, this is what I would like to do. There has to be some “around the water cooler” conversation about how the reset fits into this and the timing. You are very good at planning on some of these things and trying to back up. If we are going to have it ready by here, we have it to the Office of Management and Budget (OMB) by here, we have to have it here—I mean, you can plan all that stuff out. That means you have to have a draft proposal here and a proposed rulemaking here.

Ms. MCCABE. Yes.

Senator LANKFORD. We need to know that agenda, and so if I give you a month and time period, can you come back to us with the reset timeframe, at least, on what the major calendar events will be on a reset? Is that a reasonable amount of time to give us, the calendar? You are not going to have to tell us what the reset is, but just when the major decision points will be made and when notice and comment will come out.

Ms. MCCABE. I will be happy to go back and talk with folks about how much clarity we can give you on that in a near timeframe, Senator.

Senator LANKFORD. Yes. If we can do that in a month, where we can come back and say, let us at least get the schedule and so we will know where things are going and give you enough time to be able to lay that out, that would be very helpful to us to get some level of predictability. Senator Heitkamp.

Senator HEITKAMP. Thank you, Mr. Chairman.

First off, I do not think we know what volumes of cellulosic ethanol can be produced because we have not given the market certainty, and so we have stalled out investment. And, so, I do not accept that, somehow, there will not be enough supply to meet the standards. And, so, let us not pre-suppose or prejudge that discussion in terms of what is going to happen in the marketplace.

But, I would rather get back to the rule that we are talking about and debating. I think I mentioned it in my opening comments and Senator Ernst followed on that in kind of walking through EPA’s legal authority to basically deviate from the statu-

tory mandates. And, when you said the legal justification is inadequate domestic supply, I think most ethanol producers would tell you, to them, domestic supply means the supply of ethanol, and there is plenty, certainly of biodiesel, in the marketplace. In fact, we stalled biodiesel. We shut down biodiesel facilities because we did not have enough access to the market.

So, to me, inadequate domestic supply means what it means to anybody who would read it, which is the supply of the product, the fuel.

When you say you can use that language to basically justify a refueling infrastructure waiver, did you look at the legislative history from 2005 when the House language pretty clearly addressed this by saying, based on the determination that there is an inadequate—domestic waivers—based on the determination that there is an inadequate domestic supply or distribution capacity to meet the requirement. What does it tell you if amended out of that is distribution capacity and all you have is domestic supply? What would that inform you in terms of the legislative history?

Ms. McCABE. Well, Senator, what I need to look at is the language in the statute. What it tells me is that there was—

Senator HEITKAMP. If you are going to, I think, broadly read the language, inadequate domestic supply, and read it in what I would consider a fairly twisted way, you should look to the legislative history. That is what lawyers do. That is what judges do. They look, what was the intent of Congress, and when Congress repealed the language or rejected the language in their final analysis, distribution capacity, what does that mean? What does that rejection mean?

Ms. McCABE. Well, to me, it means that there was discussion and there was interest in this issue specifically from at least some members and that that language did not end up in the statute.

Senator HEITKAMP. And, what does it mean for lawyers when there is language that is proposed on one side, you go to conference and you eliminate or take out language?

It means that is not the intent of Congress to use that for waiver. You cannot bootstrap the domestic supply language to deal with refueling infrastructure. Now, I am not unsympathetic to the challenges that you have in implementing this, but let us not pretend that you have a very good legal argument here for the waivers that you have done.

I mean, that is the frustration, is that the statute was designed to give the marketplace certainty. The statute was designed to basically set standards with very limited waiver requirements. EPA took it on themselves to expand that language and create huge uncertainty, which now you are saying, see, there is not a supply. Well, there is not a supply because we did not have certainty for investment.

And, I am not trying to beat up on you here, and, obviously, I have been a frequent flyer on this issue. You guys have numerous letters led by me and other members on this, and our frustration level has been extraordinarily high, because our producers come to us and say, what? What about this is confusing?

And, let us for a minute, and not with any kind of concession, take corn-based ethanol and the blend wall. Explain to me why there was a necessity to reduce mandates on biofuels, biodiesel.

Ms. MCCABE. We are not reducing mandates on biodiesel. The statute takes biodiesel mandates up to one billion gallons, and then after that, it is up to EPA to increase the volumes, and we have, in fact, done that every year, and this proposal will again increase volumes for biodiesel above the minimum in the statute every year—

Senator HEITKAMP. But there is still room within the statute for increased volumes for biodiesel.

I want to turn with the time I have left to talk a little bit about Argentinean biofuels, and I think Senator Sasse opened up this issue, as well. Earlier this year, EPA announced approval for Argentinean biodiesel as we have seen high volumes of imports of Brazilian sugarcane ethanol. Both of those have the potential to displace domestic production and especially undermine advanced biofuel volume mandates.

I think it is really important that we understand a little bit better on how you consider imports in the equation when you are developing RVOs. This is enormously frustrating. At a time when we are shutting down domestic supply of biodiesel, we are importing from Argentina, and that makes no sense to us if, in fact, one of the reasons for this program is fuel energy sufficiency for America.

Ms. MCCABE. Yes. Well, Senator, the statute does not distinguish between domestic and imported fuel. It sets volumes of total fuel, and that is not limited to domestically supplied fuel. So, we pay attention to what is happening in the global markets. There are many things that affect the amount of biofuel that could be imported to the United States. The United States also exports biofuels. So, we do pay attention to that.

The amounts of biofuel coming in from foreign countries is relatively small, and I know there is a lot of discussion and debate and disagreement about that and I have encouraged people to make sure that they give us information about this during the comment period so that we can understand what everybody is seeing.

But, the bottom line is that the statute does not distinguish between imported and domestic fuels.

Senator HEITKAMP. When you look at the numbers, it is a third, but, I think, obviously, a market in North Dakota is into Canada, and then Canadian biofuels comes into the East and West Coast. So, I understand the movement of biofuels. But, I think that when we are trying to create a program that meets the goals established by Congress, whether people on this panel agree with the program or not, and you probably have a pretty good sense that there is some—yes, there is some dispute about—there are so few things we disagree on, but this happens to be one.

But, the program that the agency who has the responsibility for administering the program, I think, has first and foremost always has to ask the question, what is the intent of Congress and what do we know about the intent of Congress, and I think that there has been a serious discussion not just among colleagues here, but certainly within the industry, and a serious concern that the intent of Congress has not been followed here.

So, I look forward to seeing the schedule. I imagine that we are going to have ongoing discussions, whether it is in the Agriculture Committee or wherever we have these discussions. This is an issue that is not going away any time soon. As Senator Lankford said, we are on reset and, obviously, trying to finish these years. But, the worst thing that we can do is not get this done timely. And, I do not mean by just sending out a draft rule. I mean by finalizing a rule so the marketplace has a certainty. We will live to fight about whether that number is right, but we cannot see this delay. It is incredibly disruptive.

Ms. MCCABE. Yes.

Senator HEITKAMP. Thank you, Mr. Chairman.

Senator LANKFORD. This is the second round, and we are going to go through and do some more open conversation, and we have been through this before in other settings. But, this is going to be a more open dialogue. We will have an opportunity to be able to talk here on the dais and include you.

I would mention one thing to my colleagues on this as far as congressional intent of the law. I would remind everyone, especially when we are discussing corn-based ethanol, if there is anything that is clear in the law, it is clear that corn-based ethanol is a decreasing percentage of what is used in the days ahead. By 2022, if I remember the number correctly, 44 percent of the ethanol that is used in the United States is to be cellulosic based on the law. So, corn continues to decrease and cellulosic continues to increase. It is one of those very clear areas. And, you have a big challenge in that we are not producing near the amount necessary.

I do want to ask you about the cellulosic, because EPA chose to do a shift in definition, somewhat. In 2013, if I recall correctly, adding in the compressed natural gas (CNG) and the liquefied natural gas (LNG) based fuels in the cellulosic category, as well, that bumped up the numbers for cellulosic and the capabilities. But, because the cellulosic technology has not come through completely with switchgrass and the wood products and everything else, the compressed natural gas has been included in that category.

Was there a discussion of that shift? Does that continue? Is that some of the conversation that CNG bleeds over into that cellulosic category more? Where does that go from here as far as definitionally?

Ms. MCCABE. Well, Senator, I may need to get back to you on some of the specifics of that question, but the additional fuels that are coming into the market qualify as cellulosic fuels, and so as those come in, then we add those to—

Senator LANKFORD. Talk us through those and those definitions, the new fuels that are in the cellulosic—

Ms. MCCABE. Well, the biggest one that has happened recently is biogas, which was recently approved and is being produced in encouraging amounts. So, that is one. We also have various ones that are in process. Pennycress is one, and there are several others. I would be glad to provide you with details about what we have in the pipeline and recently proposed and recently approved.

Senator LANKFORD. The proposed volume that I see here, somewhere around 206 million gallons for 2017, I believe the mandate is somewhere around four billion gallons for that year. So, again,

I do not see any way possible that we are not going to be into significant reset time period as we approach, especially that number on the cellulosic side of things and where that goes. Help me understand—we have talked a little bit about 2017 and reset—the methodology that you set for 2017, I would assume, is going to bleed through to 2022, when this really is very open at that point, when the statute stops giving clarity and EPA has the ability to be able to help determine amounts in all these, as you do with biodiesel right now. Where does that go? Is the example of biodiesel a good example to be able to look at the path that EPA considers for 2022? But, as we are looking on the horizon here, 2022 is not that far away anymore. What is the best model that we can see heading toward 2022?

Ms. MCCABE. Well, you are right. I mean, it is both near and far, and we have much to do in between here and there, in particular, assuming that all the triggers are met for reset, a relook at those volumes. So, I think that that will be an important place to think about that.

I will say that it is our hope that the approach that we have laid out in this proposal is one that we can rely on and that people can look to as a way of thinking about how to predict the volumes in the future years no matter how the reset rule comes out in terms of changing the volumes in future years.

Senator LANKFORD. So, that is what I am trying to get at. So, as everyone looks at it—and there is a tremendous amount of capital investment, whether it is in Iowa, doing capital investment on plants, or wherever it may be. Everyone is looking on a 10-year window in capital planning. What is going to happen in 2022 is incredibly significant right now, because a facility does not come up to speed in a year, a year and a half, 2 years.

Ms. MCCABE. Mm-hmm.

Senator LANKFORD. So, that investment portfolio is incredibly important.

Ms. MCCABE. Mm-hmm.

Senator LANKFORD. When could we expect any kind of clarity from EPA on how this path is going to lead to 2022 and what happens at that point? So, give us a picture of the kind of timeframe that you hope to accomplish, knowing that there are billions of dollars of investment that will be affected that have to have some advance planning.

Ms. MCCABE. Right. So, the standard itself set levels out to 2022—

Senator LANKFORD. Correct, which we will not make any of.

Ms. MCCABE [continuing]. And in our view and in the view of many, those very standards are not ones that, at least in the near term here, we think are achievable. Our job, as given by Congress, is in the case that those volumes turned out to be problematic to achieve, to reset those volumes. That is the rulemaking in which we would have the public discussion, we would go through the information and reset those volumes into the future, which then would provide that certainty into the future. The idea would be that those would be the volumes that would be reasonable, responsible, achievable, meet the intent of Congress in terms of growing

these volumes so that we would not need to be talking about waivers in the future.

Senator LANKFORD. So, let me try to help provide some clarity here, and I want others on the dais to be able to join in this conversation.

When you talk about the reset, are you talking about a reset of resetting a number or resetting a method of how you will get to the number each time?

Ms. McCABE. My understanding is that our job is to reset the numbers.

Senator LANKFORD. But that is the annual. I am talking about the process of the reset. We are talking about two different processes, the process toward setting the annual number, but then the process of how we will do reset. Will that process on how we do reset, a process of how we will set the new numbers or resetting what the new numbers will be?

Ms. McCABE. So, the statute gives us a number of factors to consider.

Senator LANKFORD. Right.

Ms. McCABE. So, my understanding is that is what we will do. We will undertake a rulemaking looking at all of those factors to determine, then, what the numbers should be in that reset rulemaking for years out into the future.

Senator LANKFORD. OK. So—

Ms. McCABE. And then the annual—I am sorry to interrupt you—

Senator LANKFORD. No, that is all right. I was just going to say, help us understand “into the future,” how far in the future you hope to go when you talk about the reset side of things.

Ms. McCABE. Well, the statute goes through 2022—

Senator LANKFORD. Correct.

Ms. McCABE [continuing]. So, I am not prepared to discuss today, because we really have not thought about that issue, about what would be our authority or responsibility to go beyond that. But, we would be certainly looking at the statutory numbers.

Senator LANKFORD. So, the hope is to get some sort of reset number that goes out multiple years with the annual rule coming out on time in November.

Ms. McCABE. Mm-hmm.

Senator LANKFORD. OK. Then I would just say to you again, it will be extremely important for all players involved that we start working toward certainty on 2022 on this, because there is a tremendous amount of capital planning that is going on right now—

Ms. McCABE. Yes.

Senator LANKFORD [continuing]. Either direction. Senator Ernst.

Senator ERNST. Yes, and thank you, Senator.

Yes, the cellulosic has been an important move in Iowa. We have biodiesel. We have the ethanol, and that is up and running. Innovation and technology is advancing so rapidly, and we have those investors that really do want to join in. But, I think, Senator Heitkamp alluded to earlier that the investors, when there is not a set volume out there, they are very hesitant to engage. So, we have the two cellulosic plants that are up and moving, and we have a third set to come online. But, for any State, any investors in any



State to move forward, they want to know that there is going to be a set volume and a demand for those products.

Ms. MCCABE. Mm-hmm.

Senator ERNST. So, first, we have to know what those volumes are in order to invest in this area. But, we also need the infrastructure that is available, and again, you have used that as an argument why we need to lower some of the volumes. But, I think one of the original intents of this was to incentivize getting some of that infrastructure into place, and you will see that high volumes of biodiesel, ethanol are used throughout the Midwest. We have the plants, but we also have the infrastructure in place to support it.

So many of the flex vehicles are being purchased on our coasts and they do not have the type of infrastructure that we do in the Midwest. So, I would argue that we need to continue investing in this area and make sure that it is available. It is all about consumer choice, as well.

So, Senator Peters had asked something, and I would like you to followup a little bit about the greenhouse gases, because I find it really ironic that this Administration's public focus has been very much on clean environment and reducing greenhouse emissions, and yet what you are proposing is actually a direction that will increase those carbon emissions by less utilization of these biofuels. So, maybe if you could comment a little bit about that and why you are not looking at greenhouse gas emissions.

Ms. MCCABE. Well, an underpinning of this program is reduction in greenhouse gas emissions, and as more and more biofuels get into the system, especially advanced and cellulosic advanced biofuels, that is where the real reductions can be. As you know, in order to qualify as an advanced biofuel, the greenhouse gas emissions need to be 50 percent less, and for cellulosic, 60 percent less, and that is where we want the growth to be.

And, that has been happening. Of course, volumes have been increasing steadily over time, not to the level that the statute called for, but they have been steadily increasing over time. Our proposal here would take cellulosic biofuel from 33 million gallons in 2014 to 206 million gallons in 2016. That is substantial increase, not as much as Congress anticipated or hoped for, but from where we are now, that represents substantial growth.

And, so, my point to Senator Peters was that in each individual annual volume rule, we do not reanalyze greenhouse gas emissions, but we know the greenhouse gas reductions associated with these different categories, and by growing the volumes, by setting the targets to drive that growth in a responsible way, we will be seeing reductions in greenhouse gases, because every gallon of gasoline that is replaced by cellulosic advanced biofuel is greenhouse gas emissions saved.

Senator HEITKAMP. I would just like to make a point about this, you talk about the proposed 2016 standard for cellulosic biofuels, those fuels with the lowest greenhouse gas emissions, is more than 170 million gallons, which is six times higher than the actual 2014 volumes.

I think it is worth noting that it is likely because three commercial scale refineries came online in 2014 and one more is slated for the end of this year. Those bio refineries were made possible by the

investments that were created before the disruption with the rule. And, I think when you look at since then, guess how many proposals have been online. Zero, because we disrupted through this rule and through the lack of timely rulemaking, we have disrupted the investment.

We need to get back, and I think no matter what our view of the wisdom of the RFS is, if it is a law, we expect it to be administered in a way that Congress intended, and I think Senator Lankford is on the right track when he says, tell us what the schedule is, tell us what the plan is, because if we can debate the wisdom of this law here in Congress. That is our job. But, it is your job to administer this the way Congress intended and that means doing it timely, because I think we can meet these standards if the investors out there know that they will have access to the market.

And, so, it is just critically important that we not automatically assume that we are going to have a crisis on cellulosic biofuels or ethanol before we actually give the certainty to the market and let the market produce.

Senator ERNST. I would agree, and with the cellulosic, as well, we have other advances coming with algae, and, of course, investors are not looking at that in a way that we had hoped they would if we would have had those set volumes. So, again, technology is advancing. It is a great renewable energy source. It is taking, basically, waste products and producing a fuel that is very low greenhouse gas emissions.

So, I would agree. I think we have a law in place. We need to understand what those volumes are. But, we do need to move forward and follow the intent of Congress, and I am at a point where I do not believe that the EPA is doing that. But, I hope that we can work through these issues. Thank you.

Senator LANKFORD. Let me do something that everyone at home is going to be shocked at. Let me take the side of the EPA—  
[Laughter.]

And say that the cellulosic was a great theory and there are a lot of people experimenting with it. No one has been able to make it in a quantity that is affordable yet, and that has been the challenge of it. The largest manufacturer of cellulosic products just went bankrupt this past year, and it was a major hit in the cellulosic market because they were the leading company. But, after a decade of trying to make this technology work, they could not make it work at a price that people could afford.

Now, there is a lot of experimentation with this. It is not close to being market-ready, and the challenge that the EPA has is that they have a mandate by 2022 to get to 44 percent of the ethanol that is used in the United States to be cellulosic, and no one can seem to crack the code to be able to make this in a way that is actually affordable. While there are lots of folks experimenting with switchgrass and wood and with stalks and with algae and other great ideas, so far, that is actually not a technology that exists.

In some ways, I feel like we are the mode of the 1970s when President Carter said that they were starting all this research on solar power, and by the year 2000, 20 percent of America's energy would be produced by solar power. It is now 2015 and we are not

close to that number. A declaration and Congress even setting a number does not mean the technology is going to actually catch up.

And, on the greenhouse gas side of things, the challenge that you have is that you are also working on a rule right now on ground-based ozone, and ethanol increases ozone. In fact, EPA's own study has come out and said, if we hit the RFS totals, the ozone levels go up across America, in many areas, even significantly. So, the challenge that we have right now is that we are dealing with a balance of how do we get RFS totals and use Corporate Average Fuel Economy (CAFE) standards, decreasing the amount of gas that we are using, and actually hit new ozone standards. One of the three of those, or two of the three of those are not going to work because they do not work together at this point.

How far off am I on that?

Ms. McCABE. Well, there is a lot in there, but I think I would agree that there are a number of factors that have affected the development of cellulosic fuels. We work very closely with the producers and the developers. We spend a lot of time with them so that we can understand the challenges that they are facing. And, we certainly hear, as you have described, a desire for clear certainty in the market and ambitious targets, which we think we are proposing here in this rule. But, we also hear about other challenges that those fuels have had in getting up and running. And, I think everybody wants those types of fuels to be successfully produced and marketed, and the more that that happens, the prices will come down and people will use them.

But, I would agree with you, Senator Lankford, that there are many factors there.

Senator LANKFORD. And, you asked about the E85, as well. You have this assumption that E85 is going to dramatically increase in usage, even 6 months from now. I am trying to figure out the assumptions that went into that, because my understanding is there are enough E85 vehicles on the road right now to meet the E85 requirements, but many of those individuals that have E85 vehicles choose to purchase E10. Now, that is a consumer preference there. So, I am just trying to figure out why EPA assumed that E85 would suddenly jump when there are E85 owners that choose not to use that product.

Ms. McCABE. Well, you are correct that there are lots of flex fuel vehicles on the road today that could use E85. Our information is that there are about 3,000 stations in the country that provide E85. I live in Indiana. I see that at my gas station, but not everybody does.

There are issues with the pricing of it, because the energy value of E85 is different than the energy value of gasoline. I think people do not fully understand that, and this is a long process to change people's understanding of their choices on transportation fuel, and prices need to move in directions that will encourage people to understand that that can be an economical choice for them. And, I think that that is a multi-year process and we have seen progress there.

Our proposal here is intended to be forward looking and optimistic because we understand that Congress wanted these fuels to be driven into the market.

Senator LANKFORD. Right, but I am trying to get at the actual methodology of picking it. Is the assumption just we are going to try to push the issue here, but there is not a method to say, we anticipate on car purchases, or anything else, or availability, that people that have flex fuel vehicles will start using this product more.

Ms. MCCABE. So, we have looked at a variety of things. We know that there are flex fuel vehicles out there that could be using E85 that are not now. There is not a precise mathematical formula, Senator, that we have used.

Senator LANKFORD. It is more of an aspirational goal rather than an actual, we see this and so we anticipate this use?

Ms. MCCABE. I would say it is an optimistic goal, but informed by our judgment, our understanding of the way the market has developed so far, what, in our judgment, it can do. EPA has regulated the fuel market for many years, and this is all laid out for people to agree or disagree with in the proposal and we welcome that. But, it was all those things that went into that with, however, respecting Congress' clear intent that volumes of these fuels increase and that it was going to take a push in order for that to happen. Our understanding is that Congress meant more renewable fuel to be used than would be used without the RFS.

Senator ERNST. I would say, too, that, just going a little bit further, I mean, I have a diagram—you can pull this up on the Internet—where all of those E85 pumps are located, and you will see that most of them are in the Upper Midwest. And, again, a lot of flex fuel vehicles that are bought out there, they simply do not have access to E85 because those pumps and the infrastructure is not yet available. So, I think, if we had that infrastructure in place, we would see E85 use go up.

So, again, I do want to go back. There are challenges to cellulosic and algae as we move forward. But, again, so many other types of fuels have seen this problem in the past, and fracking is a great example of that, and I support fracking. But, it took many years for that to become a cost effective way of extracting fuel.

So, we have those challenges, but, again, we are moving forward in Iowa. Many States are moving forward with cellulosic. The greenhouse gas emissions go down tremendously with that product, and I think that is a goal that everybody would like to see. Thank you.

Senator HEITKAMP. As long as we are talking about cars, if you look at an analysis, and I think Senator Lankford alluded to engines, and we obviously have had a great deal of discussion in the Agriculture Committee, including the National Association for Stock Car Auto Racing (NASCAR) drivers who come in and swear by this as a fuel source, so I think the jury certainly is not back on that issue.

Senator LANKFORD. For a \$3 million NASCAR vehicle. [Laughter.]

Senator HEITKAMP. But, if you look at an analysis of model year 2015 warranty statements and owners' manuals, I think you would see that it reveals that auto manufacturers explicitly approve the use of E15, which we have not talked about yet, in approximately two-thirds of new vehicles, and E15 is approved by EPA for all

2001 and newer vehicles, which really accounts for 80 percent of the fleet of automobiles out there.

Was this taken into consideration, or how did you take this into consideration when you developed the rule?

Senator LANKFORD. And, I do not want to interrupt. I do want you to answer that question. I have an Appropriations hearing that I am going to have to run back and forth to a quick vote on, and so if you will excuse me, if Senator Ernst can take the chair here at this point, I will return. And, I do not want to sound like Douglas MacArthur all of a sudden, but, yes, to be able to come back and forth. But, I have a quick vote in Appropriations and I will be right back from there. So, if Senator Ernst would take the chair, as well. But, Senator Heitkamp is tough to work with, so hold your own. [Laughter.]

Senator HEITKAMP. Thank you.

Ms. MCCABE. So, E15 is very promising as a way to get more ethanol into the system, and there has been a lot of discussion about vehicles using it and not using it. There is relatively little getting into the system now. I think there are fewer than 100 stations across the country that are offering E15.

Again, I think that this is an issue that we all need to be focused on, how we can increase people's use of this fuel. And, as more and more new cars come into the system and people understand and are comfortable that this is a fuel that they can use in their vehicle, that those attitudes will change and prices will change and the infrastructure will come. It is a challenge, Senator, I grant you.

Senator HEITKAMP. I think if you looked at the chart that Senator Ernst just showed you, you would see is a partnership with State Governments, basically providing incentives to build out the infrastructure doing the things that we need to do on a State-based level.

I am curious about how much you have heard from actual jobbers or people who have filling stations, as we used to call them in the old days, not the major distribution centers but those guys who now are concerned about the quality of their tanks, concerned about the regulation of E15. What is the conversation back and forth between EPA and the actual convenience stores and filling stations?

Ms. MCCABE. They convey to us challenges, and, of course, wanting to meet the needs of their customers, looking at the cost to install new infrastructure and uncertainties that they might have about new technology and just being able to cover the cost of putting that infrastructure in by being able to sell that product.

Senator HEITKAMP. Do you think you have clear rules on what EPA's requirements are for that infrastructure?

Ms. MCCABE. I believe so.

Senator HEITKAMP. A lot of them do not think so. A lot of them think there is a level of uncertainty—

Ms. MCCABE. OK.

Senator HEITKAMP [continuing]. And as a result, I think that they tend to be concerned about maybe over-building infrastructure, over-building their tanks so that there is no concern at all later on.

Ms. MCCABE. That is something I would be happy to take back and look into, Senator.

Senator HEITKAMP. Great. So, we are not just talking about blender pumps and all of those issues, the infrastructure issues and what that means. We are also talking about long-term concerns about moving to E15. And, so, it would be good to figure out what role EPA plays in providing the certainty to our filling stations as it relates to converting and moving into E15, which most vehicles now basically are approved for.

Ms. MCCABE. Yes. Glad to look into that.

Senator HEITKAMP. OK.

Senator ERNST. All right. And, with the E15, too, the impact to our U.S. consumers, if they do have that choice and are using E15, it is typically anywhere from a nickel to a dime lower, even, than the E10. So, across the United States, then, the impact to our consumers is that there is a savings of about \$5 to \$7 billion per year in their own pockets. So, it is something that I think we need to take a look at and continue to refine.

Did you have any further questions, Senator?

Senator HEITKAMP. As long as we have some time here, and the Chairman—when the cat is away— [Laughter.]

When we look at, I think, the Renewable Identification Numbers (RIN) prices, and it is so complicated for a lot of people to understand, but your latest proposal talks about the lack of correlation between RIN prices and gas prices as well as the need to have higher RIN prices to drive investment and infrastructure. However, your proposal had the opposite effect in the RIN market, and even DOE has said we will not hit 10 percent blends by 2016.

When you guys were plotting this out and fretting, did you consider the disruption that that would have to the RIN market and what that would mean kind of long-term, and does that inform how you want to deal with this in the future?

Ms. MCCABE. So, I think that one statement you said, Senator, that everybody can heartily agree with is that this is incredibly complicated—

Senator HEITKAMP. Yes.

Ms. MCCABE [continuing]. Very complex. I have been working on this now for 2 years and I feel like I am beginning to understand it. But, I am not an economist and so I—there is much discussion about this issue that goes on with people with that kind of training and understanding.

What we tried to do was to provide some more information for the public record about what we had seen in the RIN market. But, we would certainly not purport to say that RIN prices are—the relationship between RIN prices and what we set in the volumes is very complex and is affected by many things, not just the volumes that we set.

Senator HEITKAMP. Do you not think you were a major driver, volumes were a major driver?

Ms. MCCABE. I would not say it is not a factor, but the prices of feedstocks and the many things that go into producing fuel have a lot to do with this, as well. So, it is not simple. It is complex.

We pay attention to RIN prices, but we do not formally factor them into our decisionmaking because it is so complex. And, it is

clear, Congress established the credit system as a way for this program to work and for obligated parties to show compliance. So, it is a fact of how the program works and as long as biofuels are more expensive to produce than gasoline, you need the system that Congress set up in order to drive those volumes up, make the fuels more affordable for people so that it gets into the system and it builds and then people use it.

Senator HEITKAMP. I guess we will have to agree to disagree. I think it was a major factor in what happened in the RIN market and I think we want to avoid that, at least avoid people like me coming back to you and saying this disruption has created an additional disruption in the marketplace.

I want to ask the Chairman, to have Senator Baldwin's statement introduced into the record.<sup>1</sup>

Senator ERNST. Yes, without objection.

Senator HEITKAMP. Thank you.

Senator ERNST. Yes, and I could go on all day, I think, about the value in having renewables. It has been exciting to see the development over the course of time, and we do have to remember that this is an energy area that is fairly young compared to other types of energy sources that we have had here in the United States, and we have seen support of those industries for over 100 years.

So, again, relatively young, developing source of energy, and, again, clean burning, I would say, and very supportive of our economy here in Iowa, which is why, even though it was not expressly written in the law that we use domestic sources of fuel, I would encourage that in the future as something that we take into consideration rather than utilizing some of these biofuels from other countries, as well, so that might be something that we need to look at in the future. I think that would help increase our production, obviously, here in the United States, but promote the infrastructure, promote the development and further technology advancements.

Senator Heitkamp, are you—

Senator HEITKAMP. I just have a final comment, and it is probably not exactly on target here, but we have been talking a lot about advanced agricultural manufacturing, meaning let us use products that are renewable. Let us use green products. If you look at the fuels industry, the fuels industry has been a building block. It has been a foundational piece. The technology that was developed in fuels later leads to a lot of great advanced manufacturing using renewables.

And, so, this has an environmental effect beyond just the fuels market. This has an environmental effect on all kinds of building supply issues, all kinds of issues as we build out more and more renewable sources for building supplies, and as Senator Stabenow would say, you can eat your car seat because it is made out of soybeans.

And, so, I think this has been an industry that has been very beneficial to the United States of America, and I think beneficial to consumers. And, we want to make sure that when Congress has a policy and it pretty clearly states these are the reasons for waivers, that the agency who is responsible follows that policy.

<sup>1</sup> The prepared statement of Senator Baldwin appears in the Appendix on page 35.

Now, like I said, I am not unsympathetic, but, in part, this was to drive the infrastructure. And, when you retreat from the number, it has the opposite effect and it just creates a spiral to a place where we do not want to be, because that would not be a place that would be consistent with congressional intent.

And, so, I look forward to working with you, Ms. McCabe, and talking more about kind of what the future holds. I look forward to hearing the outcome of the hearing that you are going to have in Kansas City. I know it will be very robust. I know you are probably getting tons of comments already. And, hopefully, a relook at some of the issues that we think are possible that will, in fact, be more consistent—adjusting the rule. And, I would particularly ask you to look at that in the biodiesel area.

Ms. MCCABE. Yes.

Senator ERNST. Yes, and just on a final—is the Senator on his way back?

And, just, kind of in some of my conclusions, I think we need to get these volumes set, but I think we need to take a very close look at what we are doing and how we want to encourage the market to develop, and again, that vicious cycle in place. Right now, commodity prices are extremely low, so when you see \$3 corn, now is a good time to be developing that area and working with ethanol or cellulosic. So, I would encourage a good, hard look at that, and again, look forward to working with you.

Again, if you would, please, emphasize to the EPA Administrator Gina McCarthy that we would absolutely love to have her in Iowa and be able to show her the process from the time that seed goes into the ground to the time we are producing it and sending it out to consumers.

So, we will at this point just recess for just a few minutes and we will wait for Senator Lankford to conclude the meeting. Thank you.

Ms. MCCABE. Thank you, Senator.

[Recess.]

Senator LANKFORD [presiding]. I will return us back from recess. I apologize for the delay. You will be glad to know we are voting and working through the Interior appropriations, which EPA has a little bit of connection to, as well. So, I apologize for that back and forth.

When I stepped out, the ongoing conversation was on E15 and I would have appreciated being in that dialogue, as well, so I want to get a chance to followup with you on that, as well.

Ms. MCCABE. Yes.

Senator LANKFORD. You and I have had this conversation already about E15. EPA believes vehicles from 2001 forward can handle E15.

Ms. MCCABE. Yes.

Senator LANKFORD. Manufacturers on the whole do not. If you actually go to the manufacturers, in the last year, year and a half, more manufacturers are allowing E15 to be within their warranty. Would you agree the vast majority of the manufacturers do not believe E15 fulfills their warranty from 2001 until about 2013?

Ms. MCCABE. I would not want to characterize the number. I know that that is an issue for some manufacturers.



Senator LANKFORD. All right. I would tell you, I have a chart that walks through that and actually details each and every manufacturer and if they have any models at all that allow E15 to be within their warranty. It has only been within the past year, year and a half, that even the majority, even above 50 percent of the manufacturers, have any vehicle model at all that would say E15 would be tolerable in their engines.

The challenge we have is increasing the E15 really means you are increasing the E15 on new vehicles. So, it is a fairly limited amount, since most vehicles are older. My truck is 12 years old that I drive. That is common for most Americans, to have an older vehicle.

Ms. MCCABE. Yes.

Senator LANKFORD. So, the challenge is increasing numbers of the E85, and the assumption there that we are going to have this large increase in E85 and that there will be a jump on E15 use, and when there is a limited number of locations even to get it at this point—I am still going back to the assumptions and the pattern here—

Ms. MCCABE. Yes.

Senator LANKFORD. Now, again, we can talk about viability and energy usage and all that stuff, but it is a pattern of how do we discern what is coming in EPA and have the method of making their decision.

Ms. MCCABE. We did not actually assume hardly any E15 in these proposals for the reasons that you cite, and the quite few number of stations that offer it currently.

Senator LANKFORD. Right. OK. When we talk about the biodiesel, the same thing with the biodiesel, which that product has consistently exceeded the expectations of amount that is manufactured.

Ms. MCCABE. Yes.

Senator LANKFORD. What I want to try to get is a percentage or the method of your counting on the small percentage of biodiesel that cannot handle lower temperatures. We have a certain percentage that is out there, that I believe it is 56 degrees and down, it starts turning into a solid. So, that does not work for part of the biodiesel. So, the question is, how did you do that estimate, and the method of that, and the expectations, because biodiesel is now in open amounts. Obviously, EPA can set the amount from year to year based on what they feel like is best information.

Ms. MCCABE. Yes.

Senator LANKFORD. How are you trying to split the two there, to say that this part can basically be used in El Paso, Texas, and Southern Arizona year round but everywhere else, it is not going to be used year round, versus what is used year round?

Ms. MCCABE. Right. So, as you know, we look at these things from a national perspective and we look at the increases in the amount of biodiesel that has been used. I think I would say, Senator, and we would be glad to followup and confirm this for you with more details, is that with the volumes that we are proposing here, we are not in danger of exceeding the amount that the system can absorb without getting into any sort of performance problems.

Senator LANKFORD. So, what I am trying to get at is the assumption for the growth of the specific line of product is not the line of biodiesel that has a difficult time with lower temperatures. You are assuming the growth, and the information is leading you to say the growth is in the area that is not the part that has a difficult time with the lower temperatures.

Ms. MCCABE. Well, I am not sure it is different fuel, is it? We will followup with more specifics.

Senator LANKFORD. Yes. There is one that uses animal products, basically and that part, that type of biodiesel, if you get below 56 degrees, it does not work well, and so you have to use it in warmer climates where you are never going to get below that, which there are lots of parts of the country that do. But, if you start heading north very far, you are going to run into problems on that.

OK. Let me ask a little bit about the Congressional Budget Office (CBO) reporting, when they start talking about prices. According to CBO, the RFS, if it was repealed, or if its future mandates were kept at previously proposed 2014 numbers, corn-based ethanol production would remain at about 13 billion gallons was their assumption, that, basically, corn-based ethanol is already in the fuel system, it is a viable fuel, the price is where consumers want to be able to purchase it.

Ms. MCCABE. Yes.

Senator LANKFORD. CBO estimated, if the mandate went away, we would still stay at about 13 billion gallons of corn-based ethanol, even without the mandate. So, when you are looking for the push there, you are actually trying to push some of the products into other places that the market is not requesting, I guess, at that point, but since the congressional mandate is to be able to push this out into other areas.

Ms. MCCABE. Yes.

Senator LANKFORD. The challenge is, of that 13 billion that CBO has estimated that the market really requests and wants, do you use that just as a baseline? Is that a number that you all use in your estimations? Do you consider consistent what CBO estimated there? If the mandate went away totally, that 13 billion would still be there? So, is that some sort of baseline number, or how is that number used in your own reasoning?

Ms. MCCABE. So, that number, I believe, is reflective of the 10-percent amount that ethanol now fills——

Senator LANKFORD. Correct.

Ms. MCCABE [continuing]. In gasoline.

Senator LANKFORD. Our blend wall location.

Ms. MCCABE. The blend wall location. I think, Senator, that we do not actually set a standard for ethanol in the rule. Ethanol fills in, because it is considered conventional biofuel. So, we know where the blend wall is likely to be, of course, depending on how much fuel is actually used, and so we take that into account. And then, as you reflected, we understand that the intent of Congress was to push more into the system than what E10 accommodates on its own. So, we build from that.

Senator LANKFORD. OK. So, the issue that is interesting, and again, this is not your study, but in 2014, CBO, when they studied it, said if the mandate went away on corn-based ethanol, their

study said 13 billion gallons would continue to be used. It is in the system. It is built in. People like to use it.

Ms. MCCABE. Yes.

Senator LANKFORD. But, it also said those 13 billion gallons will continue to be used and the price that consumers would pay for gasoline would go down, which I thought was an interesting study to be able to look at. There is a lot of push and pull right now, and again, that is not what this hearing is about, is to talk about what happens in the long term to the RFS. But, I wanted to be able to remind folks that the people that do the scorekeeping around here have reminded us corn-based ethanol works in the market regardless, without the mandate, and the prices would actually decrease for consumers if we would remove this mandate and pull it away from us.

I am going to go back to something we started talking about earlier, and that is the ozone issue.

Ms. MCCABE. Yes.

Senator LANKFORD. So, I know you have to balance both of these, as well as many other things. How are we doing balancing this in the internal conversations on what happens to ozone levels and how ethanol does increase ozone levels, and then the standard that is coming.

Ms. MCCABE. Yes. So, the setting of the ozone standard is a health evidence-based decision that the Administrator needs to make. What the ozone standard is about is the Administrator's determination about what represents a safe and healthy level of ozone in the air for people all across the country to breathe. We are not permitted by statute, and this has been confirmed by the Supreme Court—that decision, that health-based decision, is not to be influenced by implementation issues. That is dealt with in other parts of the Clean Air Act and that has been the work of States and industry and the EPA for many years.

So, we do our job under the part of the Clean Air Act that says we set the standard so that the American people know what is the right level of ozone to have in the air. We then work with the States and others on assessing where across the country those levels, monitored ambient ozone levels, exceed that standard, and that is not everywhere in the country, not by a long shot. So, once you identify those areas, then you look to see what are the emissions that are contributing to those high ozone levels.

The way ethanol can impact ozone is not uniform across the country. It relates not just to the use of ethanol, but the production of ethanol. So, that could be a very localized situation, and those may be areas where ozone levels are healthy already and meet the standard. So, it will be a situation that we will look at place by place to determine what needs to be done in order to make sure that Americans have healthy air to breathe.

Senator LANKFORD. We are still on the same challenge on that, Ms. McCabe, and that is we have a mandate to use more ethanol and a coming mandate to decrease the ozone, even if it has some effects on it. Those two are going to be in competition. We are literally going to have cities and communities that have an increasing mandate for ethanol, but then they are going to have to find ways to use more public transportation or to decrease their lawnmower

usage or major industrial complexes will have to relocate or to be able to retrofit based on one mandate competing with another one.

I know this has to be an ongoing conversation, when, literally, communities are going to have to say, you are telling us to do this, but then telling us we have to change our stuff when this rule is actually part of the issue.

Ms. MCCABE. Yes, but it is really a question about in any given area what is contributing to those high ozone levels, and I do not think it is fair to conclude, Senator, right now, that there are areas that will be significantly affected by increased NOx associated exclusively with ethanol use as we look at areas that might not need a future ozone standard, if there is one.

Senator LANKFORD. Correct, but we will have locations that will be 0.2 outside the range and that 0.2 could very well be ethanol-based, could be part of it. So, the numbers are so close in this. If it was a big gap, I would understand that. But, they are not in many of these locations. It is very close, and ethanol will be one of those contributing factors to it.

So, this is just going to be a large cost issue for a lot of communities and I am trying to figure out how EPA is going to address that. And, again, we will not have to solve it, the two of us. There is going to be a different piece of legislation. A different Committee is going to do that. I am trying to figure out the process for how that decision is going to be made, because that 0.2 differential will be very significant in quite a few communities.

Ms. MCCABE. I do understand, and I very much appreciate your point. The history of States and EPA working together to reduce ozone levels has been to find the most cost effective ways to reduce the precursors to ozone in areas where ozone levels are high, and that is the process that would ensue if the standard is changed. So, there are lots of things that contribute to ozone non-attainment in areas that have that problem.

Senator LANKFORD. But, would there be the possibility that in that portfolio of options, that a community could say if they are 0.2 outside of the ozone level, one of the options that would be on the table is that they do not have to use as much ethanol in that region?

Ms. MCCABE. I think that would be a very complicated situation, given the competing mandates that we have.

Senator LANKFORD. And that is why I bring it up, is because you have competing mandates, and that is why I am trying to figure out the process of how to make this decision, because if they are going to have 10 things on the table but ethanol, a decreased use of ethanol in their area is not an option when we know that is a contributing factor, why could at least that be on the table, as well, because now you have two competing mandates.

Ms. MCCABE. I think that is a good question, Senator.

Senator LANKFORD. OK. We will have to resolve that in the days ahead, and I would like that to be in the set of options that a community could have to make a decision, rather than have a hit on several different industrial areas when we know, also, the ethanol use is one of the contributing factors, at least to allow them the flexibility to be able to make that decision.

Ms. MCCABE. Yes. Fuel use has always been an issue in considering how to meet ozone standards, and the agency and the States have balanced the various requirements that the Congress has laid out on fuel use against other options that they have. So, it will be an ongoing conversation and I take your point.

Senator LANKFORD. All right. I appreciate that.

The other issue deals with the foreign importation of some of the fuels that are coming in. Senator Heitkamp brought it up before. Senator Ernst brought it up before.

Ms. MCCABE. Yes.

Senator LANKFORD. It is a question that several folks have in the biodiesel and other areas, to ask the question, if this was about protecting the environment and American energy options, was the intent—and that was clear in the statute, as well—the more that we allow foreign importation of some of the fuels, how that affects the actual amounts and the targets. If a target is going to be set but a third of it is going to be fulfilled by foreign, should that be included? Again, there is a different conversation whether we allow foreign to come in.

Ms. MCCABE. Yes.

Senator LANKFORD. But, is the target number for domestically produced or all that is used?

Ms. MCCABE. We understand that the target is for all that is used.

Senator LANKFORD. So, could that be fulfilled, basically, with entirely foreign-based fuels? If at some point we had difficulty or we had a competitive group that was able to produce it much cheaper overseas and be able to bring it in, could the entire requirement be produced overseas?

Ms. MCCABE. I think it is highly unlikely, but—

Senator LANKFORD. It is probably unlikely, but—

Ms. MCCABE. Yes.

Senator LANKFORD. But, you are still targeted. Just, basically, it does not matter whether it is the foreign or domestic on that, either one. It is just setting the number of what we are going to use—

Ms. MCCABE. Of what we are going to use in this country.

Senator LANKFORD. That will be an ongoing issue. It is something that we are going to have to deal with in the days ahead, because, again, the clear mandate of this is really—it is focused on American energy efficiency, I guess, and the way we are able to provide our own energy independence. If we are not doing that, but instead we are importing it, what is the difference between importing oil or importing sugarcane or importing biodiesel products?

Ms. MCCABE. Mm-hmm.

Senator LANKFORD. Importing is importing. At that point, we are still not energy independent, of working in that direction.

What other comments would you have for me in the days ahead, for this planning and your timeframe that you have not had the opportunity to be able to talk about yet?

Ms. MCCABE. Well, Senator, I really appreciate the opportunity to come and speak with you today, and you were true to your word that you provided an opportunity for all of us to have a conversation. I know that there will be a lot of discussion in the months

ahead as people are getting their comments in to us. I just want to assure you again how focused we are on this program, how much we understand and appreciate and agree with so many of the things that have been urged by the Senators today in terms of administering this program the way Congress intended.

I will reflect again that there are a variety of views, even about what the statute requires and what Congress intended, and I assure you that we are doing our very best job, as we should as the executive agency charged with administering this, to do our best to interpret the statute in the way that we think is appropriate, is best for the American people, and to make sure that we have both ambitious and responsible efforts to implement the Renewable Fuel Standard, and that is my commitment to you.

Senator LANKFORD. OK. Thank you for that. In the days ahead, you know full well we will have an ongoing conversation about the reset and that process, the time period and some predictability there, even to know when it is going to start, when people can start to give comments, what the assumptions are going to be in that conversation, because the reset is coming and it is coming extremely quickly. So, 2022 is both near and far, as you mentioned before. Twenty-seventeen is not very far away at all—

Ms. MCCABE. That is right.

Senator LANKFORD [continuing]. And the parameters for that will be set by November 2016, so we are very close and we will be in the middle of the ongoing conversation for that. So, that is the one piece of this that I know we have to maintain a very public conversation on, but a very clear conversation on when the rules will be set and how we actually get back on schedule. And, because while we are back on schedule as of November of this year, all the rules change suddenly again for November 2016 and I am concerned that that is going to roll over, as well, in the days ahead.

Before we adjourn, I would like to announce that on July 16, the Subcommittee will hold a hearing on regulatory issues where we hope to have the Administrator of the Office of Information and Regulatory Affairs (OIRA) will testify here.

This does conclude today's hearing. I would like to thank Ms. McCabe for your testimony, both written and your oral testimony, and for the brief recess that we had to endure.

The hearing record will remain open for 15 days, until July 6 at 5 p.m. for the submission of statements and other questions for the record.

This hearing is adjourned.

Ms. MCCABE. Thank you.

[Whereupon, at 11:05 a.m., the Subcommittee was adjourned.]

## A P P E N D I X

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Senate Subcommittee on Regulatory Affairs and Federal Management  
Hearing on Re-examining EPA's Management of the RFS Program  
June 18, 2015

### **Senator Baldwin Statement for the Record**

Making a living from the land is a part of our identity as Wisconsinites. From filling our nation's grocery store aisles with fresh produce to fueling our cars and trucks with ethanol, Wisconsin's agricultural sector is a major driver of our "Made in Wisconsin" economy. The Renewable Fuel Standard (RFS) has helped Wisconsin's farmers develop our home-grown fuel sector, which has an essential role in our modern energy portfolio. The RFS has also helped to reduce our carbon emissions and stabilize domestic fuel prices.

Wisconsin currently ranks ninth in national corn production, and since the implementation of the RFS in 2005, our corn production has grown from 429 million bushels in 2005 to 450 million bushels in 2014. Nearly 40 percent of Wisconsin's corn was used to produce ethanol, which has led to critical investments in our rural communities.

In Wisconsin, we are proud of our growing biofuels industry. The state is home to nine ethanol plants, to research labs that serve the industry, and companies deploying those research findings to bring the next generation of biofuels to market. The Renewable Fuel Standard has contributed to \$4.2 billion in economic activity in Wisconsin, impacted 19,080 jobs, created \$983 million in wages, and provided \$306 million in taxes.

Wisconsin's ethanol plants produce a value-added product and are keeping more money at home. These rural businesses contribute about \$56 million to our local economies every year, and have a real impact on employment and the economic health of the communities that host them. On the research side, University of Wisconsin-Madison is home to the Great Lakes Bioenergy Research Center, one of three DOE bioenergy research centers that are working to meet the nation's need for a comprehensive suite of clean energy technologies. We are also home to research spinoffs including Virent, which is working to develop the next generation of advanced biofuels.

This home-grown resource has become more popular over the past decade. The Wisconsin Department of Transportation reports 277,096 (E85) Flexible Fuel vehicles have been registered in the state in 2013, a 23% increase from 2010, and the state now offers 135 E85 refueling stations. Wisconsin consumers have sought out ethanol as a fuel source, and the market has responded.

Congress enacted the RFS as a tool to limit our exposure to the price fluctuations of the global oil market, reinvigorate our economy, and strengthen agriculture markets. This important tool has helped provide certainty for Wisconsin's farms, manufacturers, and ethanol plants. While corn-based ethanol and advanced biofuels are not the only answers to ending our nation's dependence on fossil fuels, I believe they must be a part of a multi-faceted approach as we move forward. I look forward to working with my colleagues to ensure the RFS continues to work for our farmers and consumers.

**Janet McCabe  
Acting Assistant Administrator  
Office of Air and Radiation  
U.S. Environmental Protection Agency  
Committee on Homeland Security and Governmental Affairs  
Subcommittee on Regulatory Affairs and Federal Management  
U.S. Senate  
June 18, 2015**

**Statement**

Chairman Lankford, Ranking Member Heitkamp and other members of the Subcommittee, I appreciate the opportunity to testify on the Renewable Fuel Standard (RFS) program and the EPA's recent proposal on RFS volume standards for all biofuel categories for 2014, 2015, and 2016, and the biomass-based diesel volume requirement for 2017.

The RFS program began in 2006 under the Energy Policy Act of 2005. The program's requirements were then modified by the Energy Independence and Security Act of 2007. EISA established new volume targets for renewable fuel, reaching a total of 36 billion gallons by 2022, including 21 billion gallons of advanced biofuels. The amended statute also included a number of new provisions, including greenhouse gas emission thresholds for qualifying biofuels. After an extensive notice and comment process, EPA finalized regulations to implement the EISA requirements. Those regulations went into effect in July 2010.

EISA requires EPA to publish annual standards for four different categories of renewable fuels: total, advanced, biomass-based diesel, and cellulosic. These standards apply to producers and importers of gasoline and diesel. On May 29, we issued a proposal that would establish the annual percentage standards for cellulosic biofuel, biomass-based diesel, advanced biofuel, and total renewable fuels that apply for years 2014 through 2016, and the applicable volume of biomass-based diesel that will be required in 2017. We will finalize these standards by November 30, at which



point we will have returned to the statutory timeline for issuing the renewable fuel standards.

EPA recognizes that the delay in issuing the standards for 2014 and 2015 has led to uncertainty in the marketplace. This proposal establishes a path for ambitious, responsible growth in biofuels, and helps provide the certainty that the marketplace needs to allow these low carbon fuels to further develop.

Before I provide more detail on the proposal, I'd like to describe this Administration's overarching policy perspective with respect to fuels and the transportation sector. This perspective informs our implementation of the RFS.

The transportation sector accounts for nearly one third of domestic GHG emissions. This Administration has already taken a series of historic steps to reduce these emissions from cars and trucks through our national car and truck GHG and fuel economy standards. Making cars and trucks more efficient is a critical piece of the puzzle, but another important piece is lowering the carbon intensity of the fuels they burn. Congress recognized this fact in establishing the RFS program, which aims to increase the volumes of renewable fuels that are used in the U.S. transportation system every year.

When Congress passed the RFS provisions, it set annual targets for biofuel use that increase every year. It also included tools - known as the waiver provisions - for EPA to use in the event that it determined the statutorily prescribed volumes could not be met.

Biofuel use over the past decade has increased significantly, especially for ethanol and biodiesel, and recently we have seen important developments in cellulosic biofuel production. This is very encouraging, because cellulosic biofuels are the biofuels that have the lowest lifecycle GHG emissions profiles. Most of the growth in the Clean Air Act's biofuel targets for 2015 and beyond comes from these advanced

biofuels, and this Administration is committed to doing what we can to support such fuels.

Our recently issued proposal seeks to ensure that the growth of renewable fuel production and use continues – consistent with Congressional intent. It uses our waiver authority, in a judicious way, to establish ambitious but responsible and achievable standards.

The proposal addresses three years' worth of standards, and would set the volume requirement for biomass-based diesel for a fourth year. For 2014, we are proposing standards at levels that reflect the actual amount of biofuel used domestically in 2014. For 2015 and 2016 – and for 2017 for biomass-based diesel – the proposed standards would provide steady increases over time. The proposed volumes reflect our consideration of two essential factors: first, that the market can respond to ambitious volume targets, and second, that there are limits today to the amounts of volumes that can be supplied to consumers. The steadily increasing volumes that we have proposed mean that biofuels will remain an important part of the overall strategy to enhance energy security and address climate change. We are optimistic about the future of biofuels and think our proposal will put us on a pathway for steady growth in the years to come, just as Congress intended.

Many of our stakeholders, and indeed many in Congress, rightly want to know why the volume targets established in the statute cannot be reached. There are several reasons: slower than expected development of the cellulosic biofuel industry and the resulting shortfall in cellulosic biofuel supply, a decline in gasoline consumption rather than the growth projected in 2007, and constraints in supplying certain biofuels to consumers – ethanol at greater than 10 percent of gasoline, in particular. Our proposal includes a discussion of this last constraint, known as the “E10 blend wall.” If gasoline demand continues, on average, to trend downward or remain flat, increasing the amount of ethanol used in the fuel pool will require significantly greater use of gasoline blends with higher ethanol content. Examples are blends of 15 percent ethanol in

gasoline, or E15, and blends of up to 85 percent ethanol, or E85, both of which can be used in Flexible Fuel Vehicle (FFVs). EPA has taken steps to pave the way for increased use of higher-level ethanol blends, including granting partial waivers for the use of E15 in certain light-duty cars and trucks beginning with model year 2001. USDA has also put resources into expanding ethanol fueling infrastructure. At the same time, EPA recognizes that there are real limitations in the market to the increased use of these fuels, including current near term limits on fueling infrastructure.

Our proposal aims to balance two dynamics: Congress's clear intent to increase use of renewable fuels over time to address climate change and increase energy security, and real-world circumstances – such as the E10 blend wall – that have slowed progress towards such goals.

Thus, we are proposing standards that will still drive growth in renewable fuels at an ambitious, but responsible, rate. While we are proposing to use the authority Congress gave EPA to waive the annual volumes below the statutory levels, these proposed standards are directionally consistent with Congress' goals of increasing renewable fuel production and use over time. The proposed 2016 volumes would require significant growth in renewable fuel production and use over historical levels.

For 2016, we are proposing numbers to incentivize real growth in the market:

- The proposed 2016 standard for cellulosic biofuel – those fuels with the lowest GHG emissions profile – is more than 170 million gallons (6 times) higher than the actual 2014 volumes.
- The proposed 2016 standard for total renewable fuel is nearly 1.5 billion gallons more, or about 9 percent higher, than the actual 2014 volumes.
- The proposed 2016 standard for advanced biofuel is more than 700 million gallons – 27 percent – higher than the actual 2014 volumes.
- Biomass-based diesel standards grow steadily over the next several years, increasing every year to reach 1.9 billion gallons by 2017 – 17 percent higher than the actual 2014 volumes.

We believe that the proposed volumes are achievable, and consistent with Congress's clear intent to drive renewable fuel use up, even as we use the authorities that Congress provided EPA to manage the program responsibly.

EPA has taken other steps to improve the administration of the RFS program. We have improved the quality, transparency, and efficiency of our petition review process for new biofuel pathways that can count under the RFS program. These improvements to our pathways review process are already making a difference. Since launching the new Efficient Producer process on September 30, 2014, EPA has approved over 30 petitions for efficient corn ethanol plants with an average review time of less than 2 months. Compared to our previous performance, we have reduced our processing time for similar petitions by 80%, and we are continuing to work toward shortening that time. Since announcing our streamlining initiative, we have approved six new pathways for second generation biofuels. We have also published Federal Register Notices inviting comment on three new potentially advanced feedstocks: biomass sorghum, pennycress, and carinata. These are in addition to the rulemaking we finalized last summer that clarified that certain fuels made from corn kernel fiber and biogas could generate cellulosic RINs.

Even as we propose these standards, it's important to remember that the RFS program is only one part of the overall picture for biofuels. Both USDA and DOE have programs looking at ways to support biofuels and biofuel infrastructure, and we work closely with them as we implement this statute. Companies across the country continue to innovate in this area.

EPA recognizes that both challenges and opportunities lie ahead for the sector. Introducing new fuels into the marketplace, especially advanced biofuels, is not an easy task. But that is the challenge that Congress took on with the RFS program, and we are committed to implementing the program in a way that responsibly pushes forward and grows renewable fuels over time, as Congress intended.

Going forward, EPA will continue to engage with our stakeholders and work in close consultation with the Departments of Agriculture and Energy. We will hold a public hearing on June 25<sup>th</sup> in Kansas City, Kansas, and we look forward to hearing from all stakeholders during the public comment period. We intend to finalize the rule by November 30 of this year – which will return the Agency to the statutory timeline for issuing RFS annual rules.

Again, I thank you for the opportunity to serve as a witness at this hearing for the Subcommittee.



**Biotechnology Industry Organization Statement for the Record**  
*Re-Examining EPA's Management of the Renewable Fuel Standard Program*  
 Homeland Security & Governmental Affairs  
 Regulatory Affairs & Federal Management Subcommittee  
 Thursday, June 18, 2015

Chairman Lankford, Ranking Member Heitkamp, members of the Subcommittee, thank you for holding today's hearing, *Re-Examining EPA's Management of the Renewable Fuel Standard Program* and for giving the Biotechnology Industry Organization (BIO) the opportunity to provide testimony.

BIO is the world's largest trade association representing biotechnology companies, academic institutions, state biotechnology centers and related organizations across the United States and in more than 30 other nations. BIO members are involved in the research and development of innovative healthcare, agricultural, industrial and environmental biotechnology products.

BIO represents nearly 90 companies leading the development of new technologies for producing conventional and advanced biofuels. Through the application of industrial biotechnology, BIO members are improving conventional biofuel processes, enabling advanced and cellulosic biofuel production technologies and speeding development of new purpose grown energy crops. Because the Renewable Fuel Standard (RFS) ensures that all renewable fuels produced, up to annually prescribed volumes, will be used in the U.S. market, our member companies began producing commercial gallons of advanced cellulosic biofuels in 2014. Unfortunately, EPA's unstable administration of the program since 2013 has put the statutory production targets for 2015 and 2016 beyond our reach. Nevertheless, if the agency returns to stable implementation of the program with a clear commitment to the methodology that proved successful in previous years, we look forward to expanding production in the years ahead and making an important contribution to the nation's energy security.

Our hope is Congressional Oversight, such as today's hearing will result in greater regulatory efficiency by the U.S. Environmental Protection Agency (EPA) in managing the RFS program and getting it back on track.

While we are disappointed by the EPA's most recent proposed rules for the RFS, *Renewable Fuel Standard: Proposed Renewable Fuel Volumes for Calendar Years 2014, 2015, and 2016*, EPA's failure to issue RFS rules in a timely manner that is consistent with the law should not be misconstrued as a sign that the program is broken. Up until 2013, the program worked as intended to spur innovation and growth in the advanced and cellulosic biofuels space. The advanced biofuel industry invested billions of dollars to build first of a kind demonstration and commercial scale biorefineries here in the United States, with several new, large-scale cellulosic biofuel facilities beginning operations in 2014. While cellulosic biofuels have reached commercial status, though not at the volumes envisioned in the RFS. Overall advanced biofuels met the goals of the law every year from 2010 through 2013, furthering the law's objectives of reducing our reliance on foreign oil.

Unfortunately, since a leaked draft in October 2013 of EPA's eventual proposed rules for the 2014 RFS, the *2014 Renewable Fuel Standards for Renewable Fuel Standard program (RFS2): Notice of Proposed Rulemaking*, instability in the administration of the RFS has hampered investment in new advanced biofuel technology and new feedstocks within the



United States. EPA's re-proposed rule guts the basic premise of the RFS by using a methodology that is inconsistent with the law. By considering infrastructure deployment before setting a blending target, EPA has given the oil industry the ability to control how much renewable fuel is blended based on how much infrastructure they decide to install, creating a regulatory blend wall. EPA's proposed methodology of providing renewable fuels a small share of the overall U.S. fuel market, rather than maintaining an outlook for specific volumes as outlined in the statute, is fundamentally flawed. As the experience of the past two years proves, this will undercut rather than incentivize investment and growth in advanced biofuels. As a result of EPA's actions since 2013, as a recent white paper issued by BIO and attached to today's testimony demonstrates, policy instability and delays in EPA rulemakings are responsible for a majority of an estimated \$13.7 billion shortfall in necessary investments for capacity to meet the RFS goals. EPA's delays in rulemaking have undercut the industry's ability to create new employment opportunities by more than 80,000 direct jobs. Continuation of the policy instability created by the proposed rule will predictably continue to hamper investment and growth of the advanced and cellulosic biofuels industry.

In addition to the economic impacts, the lack of a rule in 2014 and the newly released proposal increases a reliance on oil and an increase annual carbon emissions over 2013 levels. Decreased use of biofuels automatically increases use of petroleum and associated CO<sub>2</sub> emissions. In 2014, this resulted in 17.4 million metric tons of additional CO<sub>2</sub> emissions; as large as adding 3.7 million cars to the road or driving 41.4 billion extra miles. In 2015, an additional 34.9 million metric tons of CO<sub>2</sub> emissions will be emitted. Over the long-term, if EPA does not implement the program in a timely manner and consistent with the law, annual emission levels will continue to stay above the achieved 2013 level due to the failure to displace oil use and achieve greater production of advanced biofuels.

Despite the problems with the proposed rule and EPA's current handling of the RFS, legislation is not needed to get the RFS back on track. When EPA allows the law to work, the advanced biofuel industry is able to make the necessary investments and grow. The future we have hoped for is here. Last year, for the first time, several new, large scale cellulosic biofuel facilities began operations. The RFS accelerated the development of cellulosic biofuel and many additional technologies for advanced biofuels and renewable chemicals, all of which contribute to America's energy security and a cleaner environment. POET-DSM's Project Liberty in Emmetsburg, Iowa, opened in early September and is ramping up to full production of 25 million gallons of ethanol a year. Abengoa opened its 25 million gallon per year cellulosic ethanol facility in Hugoton, Kansas, in October and is also ramping up production. The technology for both facilities was in development for nearly a decade and will continue to be perfected in these first-of-kind facilities. And INEOS Bio began operating its 8 million gallon per year facility in Vero Beach, Florida, at the beginning of the year. Such successes will help America reduce its dependence on foreign oil from the volatile middle-east.

Just as these companies were bringing decade-long projects to fruition, EPA proposed a change to the RFS methodology that threatened to bring the industry's visible progress to a halt. The agency's indecision and inconsistent implementation of the RFS rule has created a damaging atmosphere of uncertainty for advanced biofuel producers, undercutting investment in the sector. Further, the agency's delays in administering other aspects of the program – notably, approval of new pathways for producing cellulosic biofuels – blocked more companies from reaching the market. EPA must administer the program more efficiently. Its attempt to change the program to benefit the oil industry is unwarranted.



Continued uncertainty about the future of the program and the volumes of biofuels that EPA and the oil industry will permit into the market will only further starve the advanced biofuel industry of necessary investment.

A drawn out legislative reform process would only serve to lengthen the delay in administration of the program, prolong the atmosphere of uncertainty for investors and continue to inhibit further development of advanced biofuels. To move forward, advanced biofuel producers need stable policy that ensures access to the market over multiple years; that is the prerequisite for continued investment in advanced biofuels. Commercializing new technology is not easy or fast. Companies have invested more than \$6 billion in R&D and commercialization efforts to build an advanced biofuel industry in the United States. The claim that the RFS needs reform is a distraction and a canard. Consistent implementation of the RFS is what we've needed all along.

We do not need legislative RFS reform, but Congress can and should encourage EPA to get back on track with appropriate administration of the RFS as 37 Senators did in a letter to EPA earlier this year. We urge the Committee to reject calls to reform the program legislatively, which only serve to lengthen the delay in administering the program and achieving its goals. Instead, BIO encourages members of the Committee to work with the advanced biofuel industry to give EPA the necessary guidance to ensure that it properly implements the RFS to get the program back on track. Doing so will undue the significant damage already done to the advanced biofuel industry and allow it to attract the capital to build new capacity.





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GrowthEnergy.org

June 18, 2015

Senator James Lankford, Chairman  
Subcommittee on Regulatory Affairs and Federal Management  
U.S. Senate Committee on Homeland Security and Government Affairs  
340 Dirksen  
Washington, DC 20510

Senator Heidi Heitkamp, Ranking Member  
Subcommittee on Regulatory Affairs and Federal Management  
U.S. Senate Committee on Homeland Security and Government Affairs  
340 Dirksen  
Washington, DC 20510

Dear Chairman Lankford and Ranking Member Heitkamp:

Thank you for the opportunity to submit written comments on today's hearing on the re-examination of the Environmental Protection Agency's (EPA) management of the Renewable Fuel Standard (RFS). As you may know, Growth Energy is the leading association of renewable fuel producers, representing 87 ethanol producers, 89 associate members and thousands of ethanol supporters across the country.

While we are disappointed that we were not invited to participate in today's hearing to give the perspective of America's ethanol producers and supporters, we are hopeful that today's hearing will highlight the success that the RFS has had in reducing our dangerous dependence on foreign oil, creating American jobs and revitalizing our rural economy, providing consumers increased motor fuel choices while saving them money at the pump and improving our nation's environment. It is unfortunate that EPA has failed to issue timely renewable fuel volumes. Furthermore, despite EPA's insistence in moving the program backward from the volumes that were established by a bipartisan Congress eight years ago, the success of the program and the certainty it can provide cannot be dismissed.

The RFS has been a resounding success. Today's ethanol industry contributes nearly \$53 billion to our nation's economy, provides nearly 400,000 American jobs that cannot be outsourced and with ethanol consistently trading 50 cents less than gasoline, saves consumers each and every day at the pump. Ethanol is a clean, homegrown renewable fuel that lowers greenhouse gas emissions (an average of 34% compared to gasoline according to Argonne National Lab), reduces harmful air toxics like carbon monoxide, benzene and toluene, and has helped to reduce particulate matter and ozone across the country. Ethanol now represents nearly 10 percent of our nation's fuel and is poised to contribute even more.

When Congress approved the RFS, it established a fifteen year program for the purpose of blending more renewable fuel into our vehicle transportation fuel system and our industry answered the call. We have produced billions of gallons of renewable fuel, have employed thousands of American workers and revitalized rural America based on the certainty of this program. From the outset, the RFS always envisioned ethanol blends that would exceed 10 percent even with assumed increases in gasoline demand. We responded by petitioning EPA to allow 15 percent ethanol into our gasoline supply over five years ago. After working with the Department of Energy's Oak Ridge National Laboratory to test 86 vehicles for 120,000 miles each, EPA approved E15 for all 2001 and newer passenger vehicles. Today, E15 is approved for 84 percent of the cars on the road. E15 has been offered to consumers for over four years without a single reported problem and because ethanol is consistently less expensive than gasoline, E15 has usually been offered for 5 and 10 cents less than regular gasoline. We have also heard from several retailers that E15 now represents roughly 24 percent of their fuel sales. NASCAR has run over seven million miles on E15, experiencing an increase in horsepower and no loss in mileage. However, the world's largest oil companies are unwilling to allow higher ethanol blends such as E15 into the consumer marketplace, threatening the success of the RFS. After utilizing every tool at their disposal to avoid complying with the clear objectives of the RFS, they then claim the program is broken. The reality is they are refusing to blend additional biofuels into the motor fuel supply chain to protect their market share, profits and maintain their 90 percent monopoly over our fuel system.

With EPA's latest proposed rule for renewable volume obligations (RVO) for 2014, 2015 and 2016, EPA is turning its back on the volumes outlined in the statute and is attempting to subvert the waiver authority provided in the statute by redefining the program as one based on demand rather than the ability to supply our fuel system. EPA's proposal is based on the flawed premise that the so-called 10 percent "blend wall" cannot be surpassed. The intent of the RFS has always been to drive innovation and investment in the production and marketing of more renewable fuel. By lowering the volumes, EPA is removing the incentive to introduce more renewable fuel into the marketplace and providing oil companies the ability to continue to dictate the terms of market access for renewable fuel producers and limit choice at the pump by consumers.

When the RFS was enacted, it provided the obligated parties, at their request, a mechanism to ensure flexibility for those who might not be able to blend adequate amounts of biofuel into their motor fuel supply. The Renewable Identification Number became both a compliance tool for EPA and an alternative market to physical blending of biofuels. Now these same parties that wanted flexibility and a mechanism to operate in lieu of blending biofuels to meet their volume obligations are falsely claiming that increasing RIN prices cause consumer gasoline prices to increase. In addition to our RIN analysis that found no impact on consumer gasoline prices, the EPA itself just released an in-depth study (Dallas Burkholder Memo to the Docket 5/14/2015) to show: "While RIN prices were significantly higher in 2013 than in previous years, we did not see, nor would we expect to see, a corresponding net increase in the overall retail price of transportation fuels across the entire fuel pool. This is because the RIN price, rather than acting as an additional cost, generally acts as a transfer payment between parties that blend renewable fuels and obligated parties who produce or import petroleum-based fuels and are required to obtain RINs for compliance purposes."

We will be providing substantive comments to EPA to demonstrate the many flaws in their proposal and urge them to enforce the law by establishing the RVOs at the statutory levels that can easily be achieved

through a combination of the use E15, E85 and biodiesel. For EPA to allow the oil companies to continue to avoid compliance with the volumes established in the law and then rewarding them through a perverse interpretation of their waiver authority does nothing but deny consumers access to higher quality, less expensive fuels while further degrading our environment.

Again, it is unfortunate that we do not have to opportunity to appear today, but we are happy to provide the committee significant information and data on ethanol, E15 and the success of the RFS at any time. We appreciate the opportunity to submit our brief comments today.

Sincerely,



Tom Buis  
CEO, Growth Energy



## WISCONSIN CORN GROWERS ASSOCIATION

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### Senate Subcommittee on Regulatory Affairs and Federal Management Hearing on Re-examining EPA's Management of the RFS Program June 18, 2015

Thank you Sens. Lankford and members of this subcommittee for holding this hearing and allowing the Wisconsin Corn Growers Association to submit a statement on EPA's management of its market access program – the Renewable Fuel Standard (RFS).

Wisconsin grows over 450 million bushels of corn, ranking ninth in the U.S. in corn production, with a value of \$1.8 billion. With a vibrant livestock industry in the state, more than half of our corn goes directly to dairy, beef, hog and poultry producers as feed.

About 40 percent of our corn is used for ethanol production at home in the nine ethanol plants in the state, which have a capacity of approximately 550 million gallons. As ethanol production only uses the starch in the corn kernel, one third of each bushel is returned to the livestock feed market as high protein distillers grain.

Ethanol production is an important value-added market for corn growers. Ethanol, and the RFS, is also an important tool in the nation's effort to achieve cleaner fuels, lower fuel prices and increased domestic fuel production security. The RFS is doing exactly what it was intended to do. It is successfully driving adoption of renewable fuel alternatives to petroleum, supporting jobs across the country, and ensuring the United States remains a global leader in developing new renewable energy sources while decreasing GHG emissions here at home.

When the RFS was first enacted in 2005, it gave EPA sufficient authority to properly encourage market access for clean renewable fuels moving forward. But EPA has skirted Congressional intent by attempting to invoke its waiver authority to reduce the amount of renewable fuel blending required. EPA's proposal to use the so-called "ethanol blend wall" as a determinant of RFS blending requirements not only runs afoul of the Agency's statutory authorities, but it also violates the clear spirit and purpose of the law.

We believe EPA has failed to follow through with Congress' intent on the RFS. The proposed RVO rule announced by EPA cuts the corn ethanol obligation by a total of 3.75 billion gallons from 2014 to 2016. This represents nearly a billion and a half bushels in lost corn demand, at a time when the market price for corn is below the cost of production for many farmers. The only beneficiary of the EPA's decision is Big Oil, which has continuously sought to undermine the development of clean, renewable fuels.

	<u>RFS Statute</u>	<u>EPA Proposed RVO</u>
2013	13.8 billion gallons	13.8 billion gallons
2014	14.4 billion gallons	13.25 billion gallons
2015	15 billion gallons	13.4 billion gallons
2016	15 billion gallons	14 billion gallons

Unfortunately, the EPA also continues to cling to the “blend wall” methodology that falsely claims ethanol has reached its saturation point at a 10 percent ethanol blend and that higher-level ethanol blends, such as E15 and E85, are not yet large enough to justify a higher RVO. With 62 percent of 2015 model new cars warrantied to run on E15, offers solid validity that there is no blend wall.

EPA is proposing to use its waiver authority in a way that does not comport with the statute. EPA does not have the ability to waive the RFS due to the so-called “blend wall” or perceived constraints on distribution. Thus, EPA must revisit the statute and ensure it properly interprets its waiver authorities. EPA’s misinterpretation of an unambiguous statute is not a problem that Congress can help with; rather, this may end up being an issue that requires the involvement and direction of the courts.

But the frustrating fact is the EPA continues to misunderstand the clear intent of the statute — to open the vertically integrated auto fuel market in order to drive innovation in both ethanol production and ethanol marketing. The Agency has eviscerated the program’s ability to incentivize investments in infrastructure that would break through the blend wall and encourage the commercialization of new technologies. By adopting the oil company narrative regarding the ability of the market to effectively distribute increasing volumes of renewable fuels, rather than putting the RFS back on track, the Agency has created its own slower, more costly, and ultimately diminished track for renewable fuels in this country.

This ongoing struggle corn growers and American consumers have with EPA lessens the opportunity for increased energy security and flexibility and misses the goal of further reducing GHG emissions. EPA’s management failure with the RFS makes us more dependent on dirtier petroleum sources than when the RFS was first enacted in 2005. It will also cause a tremendous loss in the investments already made by this nation and a multitude of private investors as well as dash future investments in advanced biofuels.

The blending targets and the methodology in EPA’s rule are already causing significant harm to the biofuel sector. These impacts are reverberating throughout the U.S. agriculture economy, and we expect this trend to continue if the targets and the methodology in the rule are not corrected.

In 2005, when it enacted the RFS, Congress laid out a vision of an America where we produce our own fuel from renewable sources, finally severing the tie between the global oil market and the price that American families pay at the pump. When Congress expanded the RFS in 2007, it sent a signal to rural America that we are partners in the country’s efforts to enhance our energy security.

Corn growers have responded by increasing corn production with improved cultivation practices to enhance sustainability and increase yields, while maintaining corn volumes for our livestock producers and for food products.

Congress gave EPA all of the tools it needs to properly administer the RFS program, and afforded the Agency plenty of flexibility to make adjustments to the program to account for anomalies in the marketplace and the pace of advanced and cellulosic biofuels development. It is imperative to protect the RFS. But legislative reform or tinkering is not necessary. It is imperative EPA manage the RFS as Congress intended.

**Post-Hearing Questions for the Record  
Submitted to Ms. Janet McCabe  
From Chairman James Lankford**

***"Re-examining EPA's Management of the Renewable Fuel Standard Program"*  
June 18, 2015**

**United States Senate, Subcommittee on Regulatory Affairs and Federal Management  
Committee on Homeland Security and Governmental Affairs**

1. EPA's proposed rule acknowledges that the year-long 2014 delay to finalize standards for a year that was nearly over was not an appropriate way to set standards. It reflects,

We concluded that the approach in the November 2013 proposal, projecting volume growth into the-then future, was not an appropriate way to set standards in late 2014, for a year that was largely over. (p. 33104)

Q: Why is this November's finalization of 2015 numbers treated differently in the proposal?

*Answer:*

The language cited refers to a decision, taken at the end of 2014, not to finalize standards that had been proposed nearly a year earlier, in November 2013. For the current NPRM, EPA in June proposed volumes for the year based on our best estimate of what is possible to achieve in 2015.

Q: Shouldn't the 2015 figures also be based on actual production as well since they will be finalized in November?

*Answer:*

EPA recognizes that where we stand in the calendar year must be considered as we determine what volumes to propose and finalize. For 2015, for example, we took estimated actual production as of the time of the proposal into account when proposing the standards, and we will consider current information in developing the final rule.

2. In 2014, approximately 75 million gallons of E85 were purchased by U.S. consumers. On page 33128 of the newly proposed rule, EPA projects 600 million gallons of E85 consumption for 2016.

Q: What methodology did EPA utilize in the latest rule proposal for calculating such a dramatic growth of E85 consumption between 2014 and 2016?

Q: Given the actual consumption of E85 to date, isn't it problematic for EPA to project a dramatic uptick in consumption of E85 beginning just 6 months from now?

Q: Has EPA conducted any studies into the average cost for individual gas stations to install the necessary infrastructure to provide E85 to customers?

Q: If E85 consumption in 2015 finishes at or near the 2014 level, what actions is EPA considering to see increase E85 numbers in 2016?

*Answer:*

As described in the NPRM, the proposed standards can be met in a variety of ways, using a variety of different fuel types in different volumes. To illustrate the possible outcomes, we evaluated a number of scenarios with varying levels of E85, imported sugarcane ethanol, advanced biodiesel and other non-ethanol advanced biofuels, and imported conventional biodiesel. The increased use of E85 to 600 million gallons is just one of the illustrative scenarios. In the same table, on page 33127 of the proposed rule, we show examples where the standards are met with only 100 or 200 million gallons of E85 being used. The time and costs associated with developing E85 infrastructure are two of the issues that the market will have to overcome if it is to choose to meet the proposed volumes through the increased use of E85. Depending on a retail station's current configuration and the breadth of changes it wishes to make to market E85, existing studies suggest that the cost could range from just a few thousand dollars to well over \$100,000 per station.

3. On May 14, 2015, Dallas Burkholder from the EPA's Office of Transportation and Air Quality released a memo titled, "A Preliminary Assessment of RIN Market Dynamics, RIN Prices, and Their Effects." In it he writes that EPA understands that higher "...D6 RIN prices, as seen in 2013, [are] expected to result in a significant decrease in the price of E85..."<sup>4</sup> During your testimony on June 18, 2015, you testified:

... The relationship between RIN prices and what we set in the volumes market is very, very complex and it's affected by many, many things – not just the volumes we set... It is not simple; it is complex. We pay attention to RIN prices, but we don't formally factor them into our decision-making because it is so complex.  
(01:35:10 et seq.)

Q: In the context of the six-fold proposed volume increase in E85 for 2016, is increased RIN price the largest factor in meeting that target?

Q: Without driving up RIN prices, does EPA have another basis for expecting the market to meet the proposed 2016 E85 volume target?

Q: If so, can you please provide that basis?

<sup>4</sup> Dallas Burkholder, *A Preliminary Assessment of RIN Market Dynamics, RIN Prices, and Their Effects*, May 14, 2015, p.2

*Answer:*

When renewable fuels cost more than the petroleum fuels they replace, the RFS requirements cause higher RIN prices that offset the higher cost of the renewable fuels and subsidize their use in the marketplace. Whether these higher RIN prices will result in increases in the use of E85, the use of ethanol in other concentrations, or the use of non-ethanol renewable fuels is a question that will be sorted out in the marketplace. We have proposed renewable fuel standards that can be met a variety of ways with a range of different fuel types. The market, not EPA, will determine what volumes of which fuels will ultimately be used to meet the standards. The increased use of E85 to 600 million gallons is just one of the various scenarios we described in the proposal to illustrate the options available to the marketplace.

4. The proposed 2014-2016 volume standards are scheduled to be finalized in November of 2015.

Q: What indicators will EPA use between now and November 30th to assess whether these changes are on-track before they finalize the 2016 standards?

Q: Does EPA plan to lower the volumes in the final rule if these indicators are not on track?

*Answer:*

Decisions regarding the final rule will be based on all the information that is available to us at the time we finalize the standards, including information provided to us through public comments. We will also continue to consult with our federal partners, including the Departments of Agriculture and Energy (including EIA), to ensure we have the most up-to-date information available.



**QFRs from 6/18/15 Senate Homeland Security and Government Affairs Committee  
Regulatory Affairs and Federal Management Subcommittee**

**Post-Hearing Questions for the Record  
Submitted to Ms. Janet McCabe  
From Senator Ben Sasse**

***“Re-examining EPA’s Management of the Renewable Fuel Standard Program”*  
June 18, 2015**

- 1) Ms. McCabe, during the hearing you mentioned that EPA did not estimate the impact that proposed RVO standards would have on transportation fuel prices due to the complicated formula involved in the calculations. You did, however, mention that EPA did consult other models and studies to make these determinations. Could you provide me with a list of the models and studies that EPA used to consult how the proposed RVO standards would impact transportation fuel prices?

*Answer:*

Recent analysis and debate regarding the RFS program and transportation fuel prices has focused on how RIN prices (rather than the RVOs themselves, per se) might affect fuel prices. EPA has conducted a preliminary assessment of the impact that RIN prices have on transportation fuel prices.<sup>1</sup> However, we did not directly rely on that assessment in the setting of the standards. Rather, we included that paper in the discussion in the rule preamble, and placed that paper in the docket for the proposal, as it represents our most recent analysis of the relationship between RVOs and fuel prices.

We have reviewed a number of other studies that have looked at the relationship between RIN prices and transportation fuel prices.<sup>2</sup> We reference these, but did not directly rely on these in setting the specific numeric standards. Our approach to establishing the proposed standards is described in detail in the NPRM. We note that subsequent to publishing the proposal, other studies have come out exploring the impact of the price of RINs on transportation fuel prices.<sup>3</sup>

- 2) Ms. McCabe, during the hearing you mentioned that EPA did not conduct a study on how the proposed RVO standards would affect international trade. You did, however, mention that EPA consulted models and studies relating to these issues. Could you provide me with a list of the models and studies that EPA used to consult how the proposed RVO standards would affect international trade and biofuel trade flows between the U.S. and Brazil?

<sup>1</sup> Dallas Burkholder, *A Preliminary Assessment of RIN Market Dynamics, RIN Prices, and Their Effects*, May 14, 2015

<sup>2</sup> See, for example, “Analysis of Whether Higher Prices of Renewable Fuel Standard RINs Affected Gasoline Prices in 2013.” Informa Economics. January 2014; and Irwin, Scott, and Darrel Good. “High Gasoline and Ethanol RIN Prices: Is There a Connection?” *FarmDoc Daily*. Department of Agriculture and Consumer Economics, University of Illinois Urbana-Champaign, 27 Mar. 2013

<sup>3</sup> Knittel, Christopher R., Meiselman, Ben S., and Stock, James H., *The Pass-Through of RIN Prices to Wholesale and Retail Fuels under the Renewable Fuel Standard*, July 2015. <http://www.nber.org/papers/w21343>

*Answer:*

For the NPRM, EPA reviewed current and historical pricing and trade information regarding sugarcane ethanol from Brazil and domestically produced corn ethanol. We used data from the Brazilian Sugarcane Industry Association (UNICA), the U.S. International Trade Commission, the U.S. Energy Information Administration (EIA), the Oil Price Information Service (OPIS), the U.S. Department of Agriculture (USDA) World Agricultural Supply and Demand Estimates Report (WASDE), the Food and Agricultural Policy Research Institute (FAPRI) at the University of Missouri, and two studies from the Center for Agricultural and Rural Development (CARD) at Iowa State University—Babcock and Zhou (2013), and Babcock, Moreira, and Peng (2013). In the proposal, EPA provided cost estimates of sugarcane ethanol and corn ethanol to illustrate the relative costs of these two biofuels, which provides insights into the potential for biofuel trade between the U.S. and Brazil.

We note that the biofuels market is inherently international: biofuels, like commodity crops, trade extensively between and among nations. EPA is aware of such trade dynamics and we monitor data related to the flow of international trade in biofuels, as described above. Multiple different factors affect the quantities of such flows, including the prices for corn ethanol, sugarcane ethanol and biodiesel, crop prices, the prices of gasoline and oil in both countries, RIN prices, various state and local biofuel policies, and national level biofuel policies, such as Brazil's requirement that a certain percentage of transportation fuel be made up of ethanol.

- 3) Ms. McCabe, during the hearing I mentioned that the Nebraska state government provided me with a breakdown of the number of registered vehicles by fuel source including automobiles that are capable of using Flex Fuel and E-10 in the state of Nebraska.

You mentioned that EPA had numbers on the breakdown of the numbers of vehicles in the U.S. vehicle fleet that can support the different fuel sources. Could you provide me with EPA's numbers that break down the U.S. vehicle fleet and the amount of vehicles that can support the different categories of fuel? Could you please provide me with EPA's numbers on how many vehicles in the U.S. fleet are capable of supporting fuel above E10? How many vehicles are capable of supporting fuel above E15? How many vehicles are Flex Fuel Vehicles?

*Answer:*

In the proposal, the number of vehicles in the fleet that are considered Flex Fuel Vehicles, which can use higher level ethanol blends (up to E85, a blend of up to 85% ethanol by volume), are derived from the Energy Information Administration's (EIA) Annual Energy Outlook. For 2016, EIA projects that there will be about 16 million flex fuel vehicles (FFVs) in the fleet. These flex-fuel vehicles can use E10, E15 as well as E85. Conventional (non-FFV) vehicles that are legally permitted to use E15 are those manufactured in 2001 or later. Based on EPA vehicle population estimates by model year that allow us to project the numbers of 2001 and newer

model year vehicles in the fleet, we estimate that there are currently approximately 169 million 2001 and newer light-duty vehicles in the fleet (out of a total over 210 million).

- 4) Ms. McCabe, in the EPA's proposed rule, the agency made a determination that, "the required volumes of advanced biofuel and total renewable fuel should be reduced from the statutory targets based on a consideration of the market to supply such fuels through domestic production or import and the ability of available renewable fuels to be used as transportation fuel, heating oil, or jet fuel." Furthermore the agency cited that the potential use of renewable fuels depends in part on the "infrastructure available for distributing, blending, and dispensing renewable fuels, as well as the vehicles in the fleet capable of consuming various renewable fuels."

As the agency made this determination what metrics did you use to calculate what constituted the necessary vehicle and fuel infrastructure that would be required for the potential use of renewable fuels and thereby necessitated a reduction in overall RVO standards?

*Answer:*

Section II of the preamble to the proposed rule discusses our rationale for proposing to waive the required volumes from statutory levels, and for the proposed levels themselves. The same section discusses infrastructure limitations. For example, in Section II.A.5 we discuss the inability of the market to reach the statutory volumes, and review data on current consumption of biofuels versus what would need to happen to hit statutory targets. Section II.B.3 also discusses infrastructure limitations, including the consumption capacity of FFVs of higher-level ethanol blends and the small overall number of refueling stations offering such blends. For example, there are approximately 3,000 refueling facilities that sell E85, out of approximately 150,000 total retail facilities in the U.S. Further, there are only about 100 facilities that currently offer E15. The discussion in those two sections and elsewhere in the NPRM collectively represent EPA's evaluation of the infrastructure limitations that, in our view, provided support for the proposed use of the statute's waiver authorities.

- 5) Ms. McCabe, during the hearing you mentioned how important it was to get E-15 fuel going in the marketplace. I've met with biofuel producers and gasoline retailers in Nebraska and I am told that one of the biggest impediments to getting E-15 to market is not having a Reid Vapor Pressure waiver for E-15 or blends above E-10 during the summer driving season. To respond to this problem, I have co-sponsored S. 1239, which was introduced by Senators Donnelly, Grassley, and Fischer. This legislation extends the Reid Vapor Pressure waiver for fuel above E-10.

This legislation will allow E-15 to compete with other fuels in the marketplace and help provide relief to biofuel producers and gasoline retailers. I am hopeful that this legislation will be considered, but I do not understand why the EPA has not used their authority to fix this issue despite their praise for E-15 in the marketplace. Could you please explain EPA's rationale for not extending this waiver?

*Answer:*

The Clean Air Act provides for a 1 psi (pound per square inch) Reid Vapor Pressure (RVP) waiver for E10, and provides that EPA can issue waivers to fuels or fuel additives if certain conditions are met. The statute precludes EPA from granting a waiver to a fuel or fuel additive if it would cause vehicles and engines to exceed their emission standards in-use. Since 10 psi RVP E15 would cause a significant number of vehicles to exceed their evaporative emission standards in-use, the Agency does not have the authority to provide such a waiver (see 75 FR 68112-68120, November 4, 2010). Based on data available at the time of the partial E15 waiver, the Agency was only able to legally grant the partial waiver for E15 up to 9 psi RVP, and that is what we did (see 75 FR 68094, November 4, 2010 and 76 FR 4662, January 26, 2011). However, it is important to highlight that in roughly 40% of gasoline nationwide during the summer months (areas where Reformulated Gasoline is required or where state programs do not allow for the RVP increase in their area to protect air quality and public health), and in all gasoline nationwide during the winter months, the lack of a 1-psi waiver for E15 does not constrain its sale.

**Post-Hearing Questions for the Record  
Submitted to Ms. Janet McCabe  
From Senator Michael B. Enzi**

**“Re-examining EPA’s Management of the Renewable Fuel Standard Program.”  
June 18, 2015**

**United States Senate, Subcommittee on Regulatory Affairs and Federal Management  
Committee on Homeland Security and Governmental Affairs**

1. The Energy Policy Act of 2005 authorizes the Environmental Protection Agency (EPA) to grant a temporary exemption of Renewable Fuel Standard (RFS) requirements to a small refinery if compliance with RFS requirements would impose a “disproportionate economic hardship” on the refinery. In 2011, the Department of Energy completed a Small Refinery Exemption Study to examine RFS impacts on this class of U.S. petroleum refineries, but circumstances have changed significantly since the 2011 Study was completed. The price of the most commonly used renewable fuel credits (RINs) for RFS compliance has skyrocketed from about 5 cents/RIN in 2011 to more than 70 cents/RIN in 2015. This cost is much higher than Congress or EPA anticipated when the RFS program was established. Since many small refineries are limited in the RINs they can generate through biofuel blending, they are forced to accept the costly and punitive compliance pathway of purchasing RINs.

- a.) Has the Agency examined how the purchasing of RINs effects small refineries since 2011?

*Answer:*

Under the statute, small refineries who believe that they would experience a disproportionate economic hardship from compliance with their RFS obligations may submit a petition to the EPA and request an extension of their temporary statutory exemption from RFS obligations. In the context of responding to small refinery petitions, EPA evaluates on a case-by-case basis all economic issues raised by small refinery petitioners, including any harm purported to be caused by the need to purchase RINs.

- b.) How about in areas of high consumer demand for diesel fuel where typical biodiesel blending yields less RINs than required for compliance? Or supply areas where biodiesel is not offered at terminals?

The Agency evaluates petitions for small refinery relief on a case-by-case basis, and petitions may include such locally-relevant considerations as consumer demand for diesel fuel or supply of biodiesel at terminals.

- c.) Will the new RFS released by your agency disproportionately impact small refiners? Do you expect to approve additional requirement waivers for small refinery petitioners?

*Answer:*

As explained in response to Question 1.a., small refineries who believe that they would experience a disproportionate economic hardship from compliance with their RFS obligations may submit a petition to the EPA and request an exemption from their RFS obligations. This is the process that the EPA follows. The decision to grant a petition based on the basis of disproportionate economic hardship is made in consultation with DOE on a case-by-case basis based on the specific information provided by petitioners.